

March 23, 2015

via email and regular mail

Leslie Patterson, Remedial Project Manager
U.S. Environmental Protection Agency
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Re: South Dayton Dump and Landfill Site, Moraine, Ohio ("Site")

Dear Ms. Patterson:

I am writing on behalf of the following companies, which are hereby responding to the "Special Notice Letter" (SNL) dated January 16, 2015 from Joan Tanaka with regard to the above Site: Illinois Tool Works Inc. (for Hobart Corporation), NCR Corporation, and Kelsey-Hayes Company (collectively Responding Companies).

The Responding Companies hereby notify the Environmental Protection Agency (EPA) that they intend to negotiate in good faith with EPA in an effort to reach an agreement, in whatever form may be appropriate, to perform or finance the Remedial Investigation and Feasibility Study for OU1 and OU2 (RI/FS) generally described in the SNL and attached draft Administrative Order and Statement of Work (SOW).

The Responding Companies are providing this good faith offer with the understanding that EPA will make vigorous efforts to include other potentially responsible parties (PRPs) as respondents under any agreement or other mechanism to perform or finance the RI/FS. These PRPs are listed as recipients of the SNLs on Enclosure 9 to the SNL package. As we have discussed with EPA Region 5 personnel on several occasions, the factual record shows that many of these PRPs have contributed substantial amounts of waste to the Site. In particular, it is especially inappropriate that the Dayton Power & Light Company has avoided responsibility for its contribution to this Site, which dwarfs any contribution by the parties to this letter. In addition, Waste Management of Ohio, Inc. and Valley Asphalt Corporation have substantial owner/operator liability at the Site and should be full participants in the work addressed in the SNL. Should other PRPs agree to perform or finance the RI/FS, the Responding Companies intend to pay only their equitable share of the cost of the RI/FS.

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As you are aware, the Responding Companies have in good faith performed all obligations under two prior orders on consent with EPA -- the 2006 ASAOC for RI/FS and the 2013 ASAOC for Removal Action (addressing vapor intrusion). The Responding Companies intend to continue to work cooperatively with EPA to complete the work under these Orders.

Please be advised that absent participation by an appropriate number of additional PRPs in the new RI/FS, the Responding Companies will request that EPA seek reimbursement of its costs related to the new RI/FS from non-participating PRPs.

The undersigned will represent the Responding Companies in negotiations regarding the Administrative Order and SOW. The Responding Companies intend to use Conestoga-Rovers and Associates (CRA) as project manager for the RI/FS. Please let me know if you need any additional information regarding CRA's technical capabilities to carry out the RI/FS or the Responding Companies' capabilities to finance the RI/FS.

I have enclosed a "paragraph-by-paragraph response" to the draft Administrative Order and SOW, as requested in the SNL. These edited documents are being provided as discussion drafts; final drafts are subject to review and approval of the Responding Companies. The Responding Companies will provide a "work plan" as to how they intend to proceed with the RI/FS at an appropriate time.

Sincerely,
LANGSAM STEVENS SILVER & HOLLAENDER LLP



Larry Silver

cc: Tom Nash, ORC (C-14J)

ENCLOSURE 1

**UNITED STATES ENVIRONMENTAL
PROTECTION AGENCY REGION 5**

_____)	
IN THE MATTER OF:)	U.S. EPA Docket No. _____
)	CERCLA Docket No. _____
South Dayton Dump and Landfill Site)	
Moraine, Montgomery County, Ohio)	
)	
To be determined)	
)	
Respondents)	ADMINISTRATIVE SETTLEMENT
)	AGREEMENT AND ORDER ON
Proceeding Under Sections 104, 107)	CONSENT FOR REMEDIAL
and 122 of the Comprehensive)	INVESTIGATION/FEASIBILITY
Environmental Response, Compensation,)	STUDY
and Liability Act, 42 U.S.C. §§ 9604,)	
9607 and 9622.)	
_____)	

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ADMINISTRATIVE SETTLEMENT AGREEMENT
AND ORDER ON CONSENT FOR REMEDIAL
INVESTIGATION / FEASIBILITY STUDY FOR OU1
AND OU2**

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ADMINISTRATIVE SETTLEMENT AGREEMENT AND
ORDER ON CONSENT FOR REMEDIAL
INVESTIGATION/FEASIBILITY STUDY FOR OU1 AND
OU2

I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent (“Settlement Agreement”) is entered into voluntarily by the United States Environmental Protection Agency (“EPA”) and ~~Hobart Corporation, NCR Corporation, Kelsey-Hayes Company and _____~~ [to be determined]; (“Respondents”). The Settlement Agreement concerns the preparation and performance of a remedial investigation and feasibility study (“RI/FS”) for Operable Unit One (OU1) and Operable Unit Two (OU2) at or in connection with the South Dayton Dump and Landfill located generally at 1975 Dryden Road in Moraine, Ohio (“Site”) and the payment of Future Response Costs incurred by EPA in connection with the RI/FS as well as Past Response Costs.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. §§ 9604, 9607 and 9622 (“CERCLA”). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (Jan. 29, 1987), and further delegated to Regional Administrators on May 11, 1994, by EPA Delegation Nos. 14-14-C and 14-14-D. These authorities were further re-delegated by the Regional Administrator, EPA, Region 5 to the Director, Superfund Division, EPA, Region 5 by EPA Delegation Nos. 14-14-C and 14-14-D on May 2, 1996.

3. In accordance with Section 104(b)(2) and Section 122(j)(1) of CERCLA, 42 U.S.C. §§ 9604(b)(2) and 9622(j)(1), EPA notified the Department of Interior (DOI) and the Director of the Ohio Environmental Protection Agency (OEPA) on _____, 20____, of negotiations with potentially responsible parties regarding the release of hazardous substances that may have resulted in injury to the natural resources under Federal trusteeship.

4. EPA and Respondents recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondents in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondents do not admit, and retain the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of fact, conclusions of law and determinations in Sections V (Findings of Fact) and VI (Conclusions of Law and Determinations) of this Settlement Agreement. Respondents and EPA agree to comply with and be bound by the terms of this Settlement Agreement and further agree that they will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA and upon Respondents and their agents, heirs, successors and assigns. Any change in ownership or corporate status of a Respondent including, but not limited to, any transfer of assets or real or

personal property shall not alter such Respondent's responsibilities under this Settlement Agreement.

6. Respondents are jointly and severally liable for carrying out all activities required by this Settlement Agreement. In the event of the insolvency or other failure of any one or more Respondents to implement the requirements of this Settlement Agreement, the remaining Respondents shall complete all such requirements.

7. Respondents shall ensure that their contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondents shall be responsible for any noncompliance by Respondents, their contractors, subcontractors, and representatives, with this Settlement Agreement.

8. Each undersigned representative of Respondents certifies that he or she is fully authorized to enter into the terms and conditions of this Settlement Agreement and to execute and legally bind the Respondents to this Settlement Agreement.

III. STATEMENT OF PURPOSE

9. In entering into this Settlement Agreement, the objectives of EPA and Respondents are: (a) to determine the nature and extent of contamination and any current or potential threat to the public health, welfare, or the environment posed by the release or threatened release of hazardous substances, pollutants or contaminants at or from the Site and to collect sufficient data for developing and evaluating effective remedial alternatives by conducting a Remedial Investigation ("RI") as more specifically set forth in the Statement of Work ("SOW") attached as Appendix A to this Settlement Agreement; (b) to identify and evaluate remedial alternatives that protect human health and the environment by preventing, eliminating, reducing or controlling any release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site, by conducting a Feasibility Study ("FS") as more specifically set forth in the Statement of Work ("SOW") in Appendix A to this Settlement Agreement; and (c) to recover response and oversight costs incurred by EPA with respect to this Settlement Agreement as well as Past Response Costs.

10. This ASAOC and the attached SOW reflect a change in approach from that described in the Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study (CERCLA Docket No. V-W-06-C-852) (2006 ASAOC) and Statement of Work attached thereto, ~~and~~ the Dispute Resolution Agreement entered into by EPA and ~~r~~Respondents dated December 15, 2010, for the evaluation of the nature and extent of hazardous substances or contaminants at the Site and the assessment of the risk which these hazardous substances or contaminants present for human health and the environment.

11. The 2006 ASAOC and the SOW directed that the RI/FS use a Presumptive Remedy approach, consistent with relevant EPA guidance, for addressing the potential risk from direct contact with the landfill contents in "the central portion of the Site" and a traditional RI/FS and human health and ecological risk assessment for all Site areas not addressed by the Presumptive Remedy. The portion of the Site which a Presumptive Remedy would address was not clearly defined in the 2006 ASAOC or the SOW. During the course of the RI/FS work under the 2006 ASAOC, EPA established separate operable units that were not contemplated by the 2006 ASAOC and its SOW. In the 2010 Dispute Resolution Agreement, the parties to the 2006 ASAOC identified as included within "OU1" a newly-defined on-Site area to be addressed by the Presumptive Remedy with respect to direct contact risk; and as included within "OU2", on-Site

areas not addressed by the Presumptive Remedy for direct contact risk, all groundwater, and any off-Site media requiring investigation.

12. This Settlement Agreement and SOW do not reference the Presumptive Remedy approach. This ASAOC does define the Site areas to be addressed as OU1 and OU2, respectively, and indicates the media that must be addressed as part of each OU. The ASAOC and SOW also indicate that work on OU1 and OU2 shall proceed concurrently.

13. The Work conducted under this Settlement Agreement is subject to approval by EPA and shall provide all appropriate and necessary information to assess site conditions and evaluate alternatives to the extent necessary to select a remedy that will be consistent with CERCLA and the National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. Part 300 ("NCP"). Respondents shall conduct all Work under this Settlement Agreement in compliance with CERCLA, the NCP and all applicable EPA guidance, policies, and procedures.

IV. DEFINITIONS

14. Unless otherwise expressly provided herein, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "ARARs" mean all applicable local, state, and federal laws and regulations, and all "applicable requirements" or "relevant and appropriate requirements" as defined at 40 C.F.R. § 300.5 and 42 U.S.C. § ~~9261(d)~~9621(d).

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601-9675.

c. "Day" or "day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal or state holiday, the period shall run until the close of business of the next working day.

d. "Effective Date" shall mean the effective date of this Settlement Agreement as provided in Section XXIX.

e. "EPA" shall mean the United States Environmental Protection Agency and its successor departments, agencies, or instrumentalities.

f. "Engineering Controls" shall mean constructed containment barriers or systems that control one of the following: downward migration, infiltration or seepage of surface runoff or rain or natural leaching migration of contaminants through the subsurface over time. Examples include caps, engineered bottom barriers, immobilization processes, and vertical barriers.

g. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans,

reports, and other deliverables submitted pursuant to this Settlement Agreement, in overseeing implementation of the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Section XII (Access and Institutional Controls) (including, but not limited to, the cost of attorney time and any monies paid to secure access, including, but not limited to, the amount of just compensation), Paragraph 37 (emergency response), Paragraph 83 (Work takeover), Paragraph 32 (Community Involvement Plan ~~and Technical Assistance Plan~~) (including, but not limited to, the costs of any technical assistance grant under Section 117(e) of CERCLA, 42 U.S.C. § 9617(e)), and the costs incurred by the United States in enforcing the terms of this Settlement Agreement, including all costs incurred in connection with Section XVI (Dispute Resolution), and all litigation costs. Future Response Costs shall also include Agency for Toxic Substances and Disease Registry (“ATSDR”) costs regarding the Site, all Interim Response Costs, and all Interest on those Past Response Costs Respondents have agreed to pay under this Settlement Agreement that has accrued pursuant to 42 U.S.C. § 9607(a) during the period from July 29, 2014 to the Effective Date of this Settlement Agreement.

h. “Group Respondents” shall mean ~~Hobart Corporation, NCR Corporation, and Kelsey-Hayes Company~~ [to be determined].

i. “Institutional controls” shall mean non-engineered instruments, such as administrative and/or legal controls, that help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use. Examples of institutional controls include easements and covenants, zoning restrictions, special building permit requirements, and well drilling prohibitions.

j. “Interest” shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

k. “Interim Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, (a) paid by the United States in connection with the Site between July 29, 2014 and the Effective Date, or (b) incurred prior to the Effective Date, but paid after that date.

l. “NCP” or “National Contingency Plan” shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

m. “OEPA” shall mean the Ohio Environmental Protection Agency and any successor departments or agencies of the State.

n. “Operable Unit One” or “OU1” shall mean all areas of the Site potentially used for waste disposal (see Figure 1 of the Statement of Work) including all media including but not limited to soil, groundwater, leachate, surface water, landfill gas and soil vapor within and beneath the extent of waste.

o. “Operable Unit Two” or “OU2” shall mean all areas and media of the Site where Site-related hazardous substances, pollutants or contaminants have come to be located outside of OU1, including but not limited to: surface and subsurface soil, groundwater, landfill gas/soil vapor, surface water, sediment and air.

p. “Paragraph” shall mean a portion of this Settlement Agreement identified by an Arabic numeral or an upper or lower case letter. References to paragraphs in the SOW will be so identified, e.g., “SOW Paragraph 15.”

q. “Party” or “Parties” shall mean EPA and Respondents.

r. “Past Response Costs” shall mean all costs, including, but not limited to, direct and indirect costs, that the United States paid at or in connection with the Site through July 29, 2014, plus interest on all such costs through such date.

s. “RCRA” shall mean the Resource Conservation and Recovery Act, also known as the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901-6992.

t. “Respondents” shall mean [to be determined].

u. “RI/FS” shall mean the OU1 and OU2 Remedial/Investigation/Feasibility Study that this is the subject of this Settlement Agreement.

u. “RI/FS Planning Documents” shall mean the OU1 and OU2 RI/FS Work Plan, Field Sampling Plan, Quality Assurance Project Plan and Health and Safety Plan as more specifically set forth in Paragraph 1.2 of the Statement of Work.

v. “Section” shall mean a portion of this Settlement Agreement identified by a Roman numeral. References to Sections and Tasks in the SOW will be so identified, e.g., “SOW Section III, Task 1. 2.2.”

w. “Settlement Agreement” shall mean this Administrative Settlement Agreement and Order on Consent, the SOW, all appendices attached hereto (listed in Section XXVII) and all documents incorporated by reference into this document including without limitation EPA-approved submissions. EPA-approved submissions (other than progress reports) are incorporated into and become a part of the Settlement Agreement upon approval by EPA. In the event of conflict between this Settlement Agreement and any appendix or other incorporated documents, this Administrative Settlement Agreement and Order on Consent Settlement Agreement shall control.

x. “Site” shall mean the South Dayton Dump and Landfill Superfund Site, located at 1975 Dryden Road in Moraine, Montgomery County, Ohio and depicted generally on the map attached as Appendix B and all nearby areas where hazardous substances, pollutants or contaminants have or may have come to be located from 1975 Dryden Road in Moraine, Montgomery County, Ohio or from former operations at 1975 Dryden Road in Moraine, Montgomery County, Ohio.

y. “State” shall mean the State of Ohio.

z. “Statement of Work” or “SOW” shall mean the Statement of Work for

development of a RI/FS for South Dayton Dump and Landfill, as set forth in Appendix A to this Settlement Agreement. The Statement of Work is incorporated into this Settlement Agreement

and is an enforceable part of this Settlement Agreement as are any modifications made thereto in accordance with this Settlement Agreement.

aa. "United States" shall mean the United States of America and each department, agency, and instrumentality of the United States, including EPA.

bb. "Waste Material" shall mean (a) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27); and (d) any "hazardous material" under Ohio Revised Code, Section 3734.01(J).

cc. "Work" shall mean all activities Respondents are required to perform under this Settlement Agreement, except those required by Section XIV (Retention of Records).

V. FINDINGS OF FACT

15. Based on available information, including the Administrative Record in this matter, EPA hereby finds that:

a. The South Dayton Dump and Landfill Site is located at 1901 through 2153 Dryden Road and 2225 East River Road in Moraine, Ohio. The Site is bounded to the north and west by the Miami Conservancy District floodway (part of which is included in the definition of the Site), the Great Miami River Recreational Trail and the Great Miami River beyond. The Site is bounded to the east by Dryden Road (formerly called South Broadway and/or Springboro Pike) with light industrial facilities beyond, to the southeast by residential and commercial properties along East River Road with a residential trailer park beyond, and to the south by undeveloped land with industrial facilities beyond.

b. The Site, which includes ~~is~~ a former ~~industrial~~ landfill, is located at 1975 Dryden Road in Moraine, Ohio. It encompasses a total of 80 acres, significant portions of which contain land filled waste. Approximately 40 acres of the ~~landfill~~ Site have been built over and/or are being used for other commercial/industrial purposes. The ~~site~~ Site includes a large quarry pond in its southern portion, portions of which ~~is~~ are a federally designated wetland.

c. Approximately 25,060 people live within a 4-mile radius of the Site. Six single-family residences are located on the northwest side of East River Road and are adjacent to the southeast boundary of the Site. A seventh single family home is located on the southeast side of East River Road and is within 300 feet of the Site. A trailer park with several residences is also situated approximately 300 feet southeast of the Site at the southeast intersection of Dryden Road and East River Road.

d. Valley Asphalt, Jim City Salvage, the Miami Conservancy District, Ronald Barnett, Margaret C. Grillot, and the heirs of Katharine Boesch are the current owners of the Site. From 1941 to the present, various members of the Boesch and Grillot families have owned a major portion of the property where dumping was conducted. Most of the properties that comprise the Site were acquired over time by Horace Boesch and Cyril Grillot.

e. The ~~landfill Site~~ operated from the early 1940s to 1996 and includes a partially filled sand and gravel pit. At times during its history, the landfill accepted contains household waste, drums, metal turnings, fly ash, foundry sand, demolition material, wooden pallets, asphalt, paint, paint thinner, oils, brake fluids, asbestos, solvents, transformers and other industrial waste. ^[LS1]As the excavated areas of the Site were filled, some of the property was sold and/or leased to businesses including Valley Asphalt and other businesses along Dryden Road and East River ^[LS2] Road. ~~The Miami Conservancy District owns the southern part of the site including part of the large quarry pond.~~

f. Disposal of waste materials began at the Site in the early 1940s. Materials dumped at the Site included drummed wastes. Known hazardous substances were disposed at the Site, including drums containing hazardous waste from nearby facilities. Some of the drums contained cleaning solvents (1,1,1-trichloroethane ["TCA"]; methyl ethyl ketone ["MEK"]; and xylene); cutting oils; paint; stoddard solvents; and machine-tool, water-based coolants. The Site had previously accepted materials including oils, paint residue, brake fluids, chemicals for cleaning metals, solvents, etc. Large quantities of foundry sand and fly ash were dumped at the Site. Asbestos was also dumped at the Site. In 1969, the Site operator, Alcine Grillot, applied for a solid waste disposal site license for a 45 acre portion of the Site that allowed him to accept and dispose of commercial and industrial wastes at the Site. Before this time, disposal at the Site appears to have been unregulated. The operator's compliance with permitting regulations after this time also appears to have been sporadic. In addition, a CERCLA Notification of Hazardous Waste Site Form submitted by Industrial Waste Disposal Company, Inc. ("IWD") in 1981 indicated that the Site had been used as a disposal facility for the industrial and municipal wastes of ~~O~~IWD's customers. More recently, the Site operated under a solid waste disposal facility permit issued by Moraine County Health Department ("MCHD"). The permit allowed disposal of solid, inert, insoluble materials such as unregulated foundry sand, slag, glass, and demolition debris. The Site was permitted intermittently between 1968 and ~~1990~~1986. In 1990 Mr. Grillot was notified that he would need new approval from OEPA to continue accepting fly ash. Delco Moraine made a special request to continue disposing of fly ash at the South Dayton Dump and received approval to continue disposing of fly ash at the Site until April 30, 1990.

g. Open air burning also occurred at the Site. In 1970 operation of an "air curtain destructor" at the Site was approved by the Ohio Department of Health. However, open burning of materials did occur at the site prior to issuance of the permit. In 1986 Mr. Grillot received a letter from the Regional Air Pollution Control Agency stating he must cease all open burning as he no longer had a permit for the air curtain destructor. Additionally, Montgomery County Ohio General Health District issued a permit for open burning to Monsanto Research Corporation with the permitted location listed as "1975 Springboro South Dayton Dump & Land Fill." There is no date of issue or expiration on Monsanto's open burning permit.

h. EPA conducted a screening site inspection of the Site in 1991. In 1991 a EPA Field Investigation Team collected soil samples at or near the Site and detected metalsecontaminants and hazardous substances at levels significantly above background^[LS3]. OEPA conducted a site team evaluation prioritization of the landfill in 1996, which revealed higher concentrations of hazardous substances than those found during the 1991 sampling. In 2002, EPA conducted an aerial photographic analysis of the site.

i. In 2000, Valley Asphalt removed several drums and 2,217 tons of contaminated soils from their property (northern area of the Site) that were uncovered when a sewer line was being excavated. A composite sample collected from the drums was TCLP toxic for cadmium and lead and contained contaminants including: PCB-1254, benzene, chlorobenzene, ethylbenzene, toluene, trichloroethene, vinyl chloride, and xylene.

j. EPA proposed the site to the National Priorities List, pursuant to CERCLA Section 105, 42 U.S.C. § 9605, on September 23, 2004. The Site received a Hazard Ranking Score of 48.63. EPA did not complete the listing process and chose to address the Site under the Superfund Alternative Sites program.

k. Between 1998 and 2004 the owners of part of the Site conducted several investigations at the landfill, including groundwater and surface water sampling, which revealed levels of contaminants above EPA's Maximum Contaminant Levels. In 2006, several potentially responsible parties (PRPs) for the Site agreed to conduct a Remedial Investigation/ Feasibility Study (RI/FS) at the Site. The RI/FS has been conducted under an Administrative Settlement Agreement and Order on Consent with EPA, effective as of August 15, 2006. In 2008, the PRPs agreed to conduct a streamlined RI/FS at the site. The PRPs conducted several investigations at the site from 2008 through 2010.

l. The 2008-2010 investigations conducted by the PRPs included geophysical surveys, test pit and test trench sampling, vertical aquifer sampling, landfill gas sampling and groundwater monitoring well installation and sampling. From these investigations, it was found that the groundwater contains vinyl chloride, trichloroethylene (TCE), 1,2-dichloroethene, ~~arsenic, lead~~^[LS4] and other chemicals. Landfill gas ~~may~~ contains methane, TCE and other volatile organic compounds.

m. On October 15, 2010, the PRPs raised a dispute over the scope of the work they were being asked to perform to complete the RI/FS work required to support a ROD for the first operable unit at the Site. The Agency and the PRPs entered into negotiations to resolve the dispute. These discussions resulted in the execution of a Dispute Resolution Agreement ("DRA") which was incorporated into the 2006 ASAOC.

n. The DRA stated that, based on the investigations completed up to that time, the PRPs agreed to divide the site work into two parts. Operable unit one (OU1) was intended to include the evaluation of cleanup alternatives to address direct contact risk for the Presumptive Remedy Area as defined in the DRA~~all areas used as a landfill, including all groundwater within and beneath the extent of the waste, and would include cleanup alternatives that would allow on-site business to remain safely operating at the site.~~ Operable unit two (OU2) was intended to address on-Site areas not addressed by the Presumptive Remedy for direct contact risk, all groundwater, and any off-Site media requiring investigation~~all contamination that had migrated beyond the boundaries of that portion of the Site designated as OU1.~~

o. In 2010, as part of the DRA, the ~~r~~Respondents to the 2006 ASAOC agreed to do a vapor intrusion study to determine whether methane and/or volatile organic carbon ("VOC") compounds were migrating from the landfill and into on-site and nearby buildings. Indoor air, sub-slab, outdoor air, and soil gas samples were collected several times in 2011 and 2012, and indicated that vapor intrusion and landfill gas migration posed an imminent and substantial endangerment to human health.

p. Between July 12 and August 8, 2012, EPA conducted a Removal Site Investigation at the Site including residential and non-residential sub-slab sampling and the installation of soil gas vapor probes along the Site's eastern perimeter. EPA sampling confirmed a completed exposure pathway with respect to vapor intrusion. Vapor intrusion sampling results from 2012 by EPA and the PRPs documented that vapor intrusion was occurring at the Site. Seven non-residential buildings had concentrations of gases that exceeded acceptable limits. EPA also documented methane levels in one building and at sub-slab screening levels that were above the lower explosive limit (5% methane).

q. EPA issued a Unilateral Administrative Order to Valley Asphalt in March 2013 compelling ~~itthem~~ to perform removal actions related to the vapor intrusion threat on Site parcels owned by Valley Asphalt. EPA entered into another Administrative Settlement Agreement and Order on Consent ("Removal ASAOC") with Hobart Corporation, NCR Corporation and Kelsey-Hayes Company ~~the Respondents~~ in April 2013 to perform the removal action related to the vapor intrusion threat. The Removal ASAOC required these ~~PRPs~~ Respondents to conduct sampling, design and install vapor abatement mitigation systems in any ~~affected~~ structures, design and install a landfill gas extraction system ~~designed~~ to prevent landfill gas migration offsite (if needed based on testing), develop and implement a performance sample plan to confirm screening levels were achieved by the vapor abatement mitigation systems, and if necessary develop and implement additional sample plans. The PRPs installed the mitigation systems at the contaminated buildings leased from the Site owners, and Valley Asphalt demolished other buildings on property it owns at the Site in the summer of 2013.

r. In June 2012, EPA, in consultation with OEPA, determined that additional data must be collected on groundwater and potential hot spots before selecting a remedy for OU1. EPA anticipated oversight of additional OU1 RI/FS field work, ~~with a proposed cleanup plan and final OU1 remedy selection by March 2015.~~

s. In June 2013, the ~~Respondents~~ PRPs took additional soil and groundwater samples under EPA oversight in OU1 to better understand sources of groundwater contamination. The sampling confirmed several groundwater contaminant plumes. The ~~Respondents~~ PRPs drafted plans to conduct additional groundwater sampling and install permanent monitoring wells.

VI. CONCLUSIONS OF LAW AND DETERMINATIONS

Based on the Findings of Fact set forth above, and the Administrative Record in this matter, EPA has determined that:

16. The South Dayton Dump and Landfill Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. § 9601(9).

17. The contamination found at the Site, as identified in the Findings of Fact above, includes "hazardous substances" as defined in Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

18. The conditions described in the Findings of Fact in Section V above constitute an actual and/or threatened "release" of a hazardous substance from the facility as defined in Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

19. Each Respondent is a "person" as defined in Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

20. Respondents are responsible parties under Sections 104, 107 and 122 of CERCLA, 42 U.S.C. §§ 9604, 9607 and 9622. For example:

a. Each Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response actions and for response costs incurred and to be incurred at the Site.

b. Respondents [insert names] are the "owner(s)" and/or "operator(s)" of the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. § 9607(a)(1).

c. Respondents [insert names] were the "owners" and/or "operators" of the facility at the time of disposal of hazardous substances at the facility, as defined by Section 101(20) of CERCLA, 42 U.S.C. § 9601(20), and within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. § 9607(a)(2).

d. Respondents [insert names] arranged for disposal or treatment, or arranged with a transporter for transport for disposal or treatment of hazardous substances at the facility, within the meaning of Section 107(a)(3) of CERCLA, 42 U.S.C. § 9607(a)(3).

e. Respondents [insert names] accept or accepted hazardous substances for transport to the facility selected by Respondents, within the meaning of Section 107(a)(4) of CERCLA, 42 U.S.C. § 9607(a)(4).]

21. The actions required by this Settlement Agreement are necessary to protect the public health, welfare or the environment, are in the public interest, 42 U.S.C. § 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. §§ 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. § 9622(a).

22. EPA has determined that Respondents are qualified to conduct the RI/FS within the meaning of Section 104(a) of CERCLA, 42 U.S.C. § 9604(a), and will carry out the Work properly and promptly, in accordance with Sections 104(a) and 122(a) of CERCLA, 42 U.S.C. §§ 9604(a) and 9622(a), if Respondents comply with the terms of this Settlement Agreement.

VII. SETTLEMENT AGREEMENT AND ORDER

23. Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that Respondents shall comply with all provisions of this Settlement Agreement, including, but not limited to, all appendices to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VIII. DESIGNATION OF CONTRACTORS AND PROJECT COORDINATORS

24. Selection of Contractors, Personnel. All Work performed under this Settlement Agreement shall be under the direction and supervision of qualified personnel. Within 30 days after the Effective Date, and before the Work outlined below begins, Respondents shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out such Work. With respect to any proposed contractor, Respondents shall demonstrate that the proposed contractor has a quality system that complies with ANSI/ASQC E4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs," (American National Standard, January 5, 1995, or most recent version), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP"). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001; Reissued May 2006) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the Work for Respondents shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Settlement Agreement is contingent on Respondents' demonstration to EPA's satisfaction that Respondents are qualified to perform properly and promptly the actions set forth in this Settlement Agreement. If EPA disapproves in writing of any person's technical qualifications, Respondents shall notify EPA of the identity and qualifications of the replacements within 30 days after the written notice. If EPA subsequently disapproves of the replacement, EPA reserves the right to terminate this Settlement Agreement and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondents. During the course of the RI/FS, Respondents shall notify EPA in writing of any changes or additions in the personnel used to carry out such Work, providing their names, titles, and qualifications. EPA shall have the same right to disapprove changes and additions to personnel as it has hereunder regarding the initial notification.

25. Within seven days after the Effective Date, Respondents shall designate a Project Coordinator who shall be responsible for administration of all actions by Respondents required by this Settlement Agreement and shall submit to EPA the designated Project Coordinator's name, address, telephone number, and qualifications. To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site Work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondents shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number and qualifications within 14 days following EPA's disapproval. Respondents shall have the right to change their Project Coordinator subject to EPA's right to disapprove. Respondents shall notify EPA three days before such change is made. The initial notification may be made orally, but shall be promptly followed by a written notification.

26. EPA has designated Leslie Patterson of the Superfund Division, Region 5 as its Project Coordinator. EPA will notify Respondents of a change in its designation of the Project Coordinator. Except as otherwise provided in this Settlement Agreement, Respondents shall direct all submissions required by this Settlement Agreement to:

Leslie Patterson, Remedial Project Manager
U.S. EPA, Superfund Division
Mail Code SR-6J
77 West Jackson
Chicago, Illinois 60604-3590

Respondents are encouraged to make their submissions to EPA on recycled paper (which includes significant post-consumer waste paper content where possible) and using two-sided copies. Respondents shall make submissions electronically according to EPA Region 5 specifications. Receipt by Respondents' Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by Respondents.

Documents to be submitted to the Respondents shall be sent to:

[Name]
Organization
Address

27. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager ("RPM") and On-Scene Coordinator ("OSC") by the NCP. In addition, EPA's Project Coordinator shall have the authority consistent with the NCP to halt any Work required by this Settlement Agreement, and to take any necessary response action when s/he determines that conditions at the Site may present an immediate endangerment to public health or welfare or the environment. The absence of the EPA Project Coordinator from the area under study pursuant to this Settlement Agreement shall not be cause for the stoppage or delay of Work.

28. EPA and Respondents shall have the right, subject to Paragraph 33, to change their respective Project Coordinator. Respondents shall notify EPA three days before such a change is made. The initial notification by either party may be made orally, but shall be promptly followed by a written notice.

29. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by Section 104(a) of CERCLA, 42 U.S.C. § 9604(a). Such person shall have the authority to observe Work and make inquiries in the absence of EPA, but not to modify the RI/FS Planning Documents or other work plans.

IX. WORK TO BE PERFORMED

30. Respondents shall conduct the RI/FS in accordance with the provisions of this Settlement Agreement, the SOW, CERCLA, the NCP, EPA guidance related to remedial investigations and feasibility studies including, but not limited to, the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01), "Guidance for Data Usability in Risk Assessment" (OSWER Directive #9285.7-05), Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part A), Interim Final (EPA-540-1-89-002), OSWER Directive 9285.7-01A, December 1, 1989; and Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments), Interim, (EPA 540-R-97-033), OSWER Directive 9285.7-01D, January

1998, and guidance referenced therein, and guidances referenced in the SOW, as may be amended or modified by EPA. The Remedial Investigation (“RI”) shall consist of collecting data to characterize site conditions, determining the nature and extent of the contamination at or from the Site, assessing risk to human health and the environment, and conducting treatability testing as necessary to evaluate the potential performance and cost of the treatment technologies that are being considered. The Feasibility Study (“FS”) shall determine and evaluate (based on treatability testing, where appropriate) alternatives for remedial action to prevent, mitigate, or otherwise respond to or remedy the release or threatened release of hazardous substances, pollutants, or contaminants at or from the Site. The alternatives evaluated must include, but shall not be limited to, the range of alternatives described in the NCP, and shall include remedial actions that utilize permanent solutions and alternative treatment technologies or resource recovery technologies to the maximum extent practicable. In evaluating the alternatives, Respondents shall address the factors required to be taken into account by Section 121 of CERCLA, 42 U.S.C. § 9621, and Section 300.430(e) of the NCP, 40 C.F.R. § 300.430(e). Respondents shall submit to EPA and the State of Ohio two paper copies of all plans, reports, submittals and other deliverables required under this Settlement Agreement, the SOW and the RI/FS Planning Documents in accordance with the approved schedule for review and approval pursuant to Section X (EPA Approval of Plans and Other Submissions). Upon request by EPA, Respondents shall submit in electronic form all portions of any plan, report, or other deliverable. Respondents are required to submit pursuant to provisions of this Settlement Agreement, including the SOW. Upon approval by EPA, all deliverables under this Settlement Agreement, including the SOW, shall be incorporated into and become enforceable under this Settlement Agreement.

31. Upon receipt of the draft FS report, EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed and will evaluate the durability, reliability, and effectiveness of any proposed Institutional Controls.

32. Community Involvement Plan ~~and Technical Assistance Plan~~

a. EPA will prepare a Community Involvement Plan, in accordance with EPA guidance and the NCP. As requested by EPA, Respondents shall provide information supporting EPA’s community involvement plan and shall participate in the preparation of such information for dissemination to the public and in public meetings which may be held or sponsored by EPA to explain activities at or concerning the Site.

~~b. When requested by EPA, Respondents also shall provide EPA with the following deliverable:~~

~~Technical Assistance Plan: Within 30 days of a request by EPA, Respondents shall provide EPA with a Technical Assistance Plan (“TAP”) for providing and administering up to \$50,000 of Respondents’ funds to be used by a qualified community group to hire independent technical advisers during the Work conducted pursuant to this Settlement Agreement. The TAP shall state that Respondents will provide and administer any additional amounts needed if EPA, in its unreviewable discretion, determines that the selected community group has demonstrated such a need prior to EPA’s issuance of the~~

~~ROD contemplated by this Settlement Agreement. Upon its approval or modification by EPA pursuant to Section X (EPA Approval of Plans and Other Submissions), the TAP shall be incorporated into and become enforceable under this Settlement Agreement.~~

33. Modification of any plans.

a. If at any time during the RI/FS process, Respondents identify a need for additional data, Respondents shall submit a memorandum documenting the need for additional data to the EPA Project Coordinator within ~~seven~~ 30 days of identification. EPA in its discretion will determine whether the additional data will be collected by Respondents and whether it will be incorporated into reports and deliverables.

b. In the event of unanticipated or changed circumstances at the Site, Respondents shall notify the EPA Project Coordinator by telephone within 24 hours of discovery of the unanticipated or changed circumstances. In addition to the authorities in the NCP, in the event that EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the RI/FS Planning Documents, EPA shall modify or amend the RI/FS Planning Documents in writing accordingly. Respondents shall perform the RI/FS Planning Documents as modified or amended.

c. EPA may determine that in addition to tasks defined in the initially approved RI/FS Planning Documents, other additional Work may be necessary to accomplish the objectives of the RI/FS as set forth in the SOW for this RI/FS. EPA may require that Respondents perform these response actions in addition to those required by the initially approved RI/FS Planning Documents, including any approved modifications, if it determines that such actions are necessary for a complete RI/FS.

d. Respondents shall confirm their willingness to perform the additional Work in writing to EPA within ~~7~~ 14 days of receipt of then EPA request. If Respondents object to any modification determined by EPA to be necessary pursuant to this Paragraph, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution). The SOW and/or RI/FS Planning Documents shall be modified in accordance with the final resolution of the dispute.

e. Respondents shall complete the additional Work according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the RI/FS Planning Documents or written work plan supplement. EPA reserves the right to conduct the Work itself at any point, to seek reimbursement from Respondents, and/or to seek any other appropriate relief.

f. Nothing in this Paragraph shall be construed to limit EPA's authority to require performance of further response actions as otherwise provided in this Settlement Agreement.

34. Off-Site Shipment of Waste Material.

a. Respondents may ship hazardous substances, pollutants and contaminants from the Site to an off-Site facility only if they comply with Section 121(d)(3) of CERCLA,

42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondents will be deemed to be in compliance with CERCLA Section 121(d)(3) and 40 C.F.R. § 300.440 regarding a shipment if Respondents obtain a prior determination from EPA that the proposed receiving facility for such shipment is acceptable under the criteria of 40 C.F.R. § 200.440(b). Respondents may ship Investigation Derived Waste (IDW) from the Site to an off-Site facility only if Respondents comply with EPA's "Guide to Management of Investigation Derived Waste," OSWER 9345.3-03FS (Jan. 1992).

b. Respondents may ship Waste Material from the Site to an out-of-state waste management facility only if, prior to any shipment, they provide written notice to the appropriate state environmental official in the receiving facility's state and to the OSC. This written notice requirement shall not apply to any off-Site shipments when the total quantity of all such shipments will not exceed ten cubic yards. The written notice must include the following information, if available: (1) the name and location of the receiving facility; (2) the type and quantity of Waste Material to be shipped; (3) the schedule for the shipment; and (4) the method of transportation. Respondents also shall notify the state environmental official referenced above and the OSC of any major changes in the shipment plan, such as a decision to ship the Waste Material to a different out-of-state facility. Respondents shall provide the written notice after the award of the contract for remedial investigation and feasibility study and before the Waste Material is shipped.

35. Meetings. Respondents shall make presentations at, and participate in, meetings at the request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues. Meetings will be scheduled at EPA's discretion.

36. Progress Reports. In addition to the deliverables set forth in this Settlement Agreement, Respondents shall provide to EPA monthly progress reports by the ~~10th~~ 15th day of the following month. At a minimum, with respect to the preceding month, these progress reports shall (1) describe the actions which have been taken to comply with this Settlement Agreement during that month, (2) include hard copies and electronic copies (according to EPA Region 5 specifications) of all results of sampling and tests and all other data received by the Respondents (3) describe Work planned for the next two months with schedules relating such Work to the overall project schedule for RI/FS completion, and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

37. Emergency Response and Notification of Releases.

a. In the event of any action or occurrence during, arising from, or relating to performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondents shall immediately take all appropriate action. Respondents shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondents shall also immediately notify the EPA Project Coordinator or, in the event of his/her unavailability,

the On Scene Coordinator (“OSC”) or the Regional Duty Officer, EPA Region 5 Emergency Planning and Response Branch at (Tel: (312) 353-2318) of the incident or Site conditions. In the event that Respondents fail to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondents shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XVIII (Payment of Response Costs).

b. In addition, in the event of any release of a hazardous substance from the Site, Respondents shall immediately notify the EPA Project Coordinator, the OSC or Regional Duty Officer at (312) 353-2318 and the National Response Center at (800) 424-8802. Respondents shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

X. EPA APPROVAL OF PLANS AND OTHER SUBMISSIONS

38. After review of any plan, report or other item that is required to be submitted for approval pursuant to this Settlement Agreement, including the SOW, EPA shall: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. However, EPA shall not modify a submission without first providing Respondents at least one notice of deficiency and an opportunity to cure within 21 days or such appropriate longer time as may be agreed between EPA and Respondents, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects.

39. In the event of approval, approval upon conditions, or modification by EPA, pursuant to Subparagraph 38(a), (b), (c) or (e), Respondents shall proceed to take any action required by the plan, report or other item, as approved or modified by EPA subject only to their right to invoke the Dispute Resolution procedures set forth in Section XV (Dispute Resolution) with respect to the modifications or conditions made by EPA. Following EPA approval or modification of a submittal or portion thereof, Respondents shall not thereafter alter or amend such submittal or portion thereof unless directed by EPA. In the event that EPA modifies the submission to cure the deficiencies pursuant to Subparagraph 38(c) and the submission had a material defect, EPA retains the right to seek stipulated penalties, as provided in Section XVI (Stipulated Penalties). EPA also retains the right to perform its own studies, complete the RI/FS (or any portion of the RI/FS), and seek reimbursement from Respondents for its costs; and/or seek any other appropriate relief.

40. Resubmission of Plans.

a. Upon receipt of a notice of disapproval, Respondents shall, within 15 days or such longer time as specified EPA in such notice, correct the deficiencies and resubmit the plan, report, or other item for approval. Any stipulated penalties applicable to the submission, as provided in Section XVI, shall accrue during the 15-day period or otherwise specified period but

shall not be payable unless the resubmission is disapproved or modified due to a material defect as provided in Paragraphs 41 and 42.

b. Notwithstanding the receipt of a notice of disapproval, Respondents shall proceed to take any action required by any non-deficient portion of the submission unless otherwise directed by EPA. Implementation of any non-deficient portion of a submission shall not relieve Respondents of any liability for stipulated penalties under Section XVI (Stipulated Penalties).

c. Respondents shall not proceed further with any subsequent activities or tasks until receiving EPA approval for the following deliverables: OU1 RI/FS Workplan, OU2 RI/FS Work Plan, Field Sampling Plan, Quality Assurance Project Plan, Draft Remedial Investigation Report, Treatability Testing Work Plan and Sampling and Analysis Plan, and Draft Feasibility Study Report. While awaiting EPA approval on these deliverables, Respondents shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth in this Settlement Agreement.

d. For all remaining deliverables not enumerated above in subparagraph 40. c., Respondents shall proceed with all subsequent tasks, activities and deliverables without awaiting EPA approval on the submitted deliverable. EPA reserves the right to stop Respondents from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

41. If EPA disapproves a resubmitted plan, report or other item, or portion thereof EPA may direct Respondents to correct the deficiencies. EPA also retains the right to modify or develop the plan, report or other item. Respondents shall implement any such plan, report, or item as corrected, modified or developed by EPA, subject only to their right to invoke the procedures set forth in Section XV (Dispute Resolution).

42. If upon resubmission, a plan, report, or other deliverable is disapproved or modified by EPA due to a material defect, Respondents shall be deemed to have failed to submit such plan, report, or other deliverable timely and adequately unless Respondents invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution) and EPA's action is revoked or substantially modified pursuant to a Dispute Resolution decision issued by EPA or superseded by an agreement reached pursuant to that Section. The provisions of Section XV (Dispute Resolution) and Section XVI (Stipulated Penalties) shall govern the implementation of the Work and accrual and payment of any stipulated penalties during Dispute Resolution. If EPA's disapproval or modification is not otherwise revoked, substantially modified or superseded as a result of a decision or agreement reached pursuant to the Dispute Resolution process set forth in Section XV, stipulated penalties shall accrue for such violation from the date on which the initial submission was originally required, as provided in Section XVI.

43. In the event that EPA takes over some of the tasks, but not the preparation of the RI Report or the FS Report, Respondents shall incorporate and integrate information supplied by EPA into the final reports.

44. All plans, reports, and other items submitted to EPA under this Settlement Agreement shall, upon approval or modification by EPA, be incorporated into and enforceable under this Settlement Agreement. In the event EPA approves or modifies a portion of a plan, report, or other item submitted to EPA under this Settlement Agreement, the approved or modified portion shall be incorporated into and enforceable under this Settlement Agreement.

45. Neither failure of EPA to expressly approve or disapprove of Respondents' submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondents' deliverables, Respondents are responsible for preparing deliverables acceptable to EPA.

XI. QUALITY ASSURANCE, SAMPLING AND ACCESS TO INFORMATION

46. Quality Assurance. Respondents shall assure that Work performed, samples taken and analyses conducted conform to the requirements of the SOW, the QAPP and guidances identified therein. Respondents will assure that field personnel used by Respondents are properly trained in the use of field equipment and in chain of custody procedures. Respondents shall only use laboratories which have a documented quality system that complies with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA.

47. Sampling

a. All results of sampling, tests, modeling or other data (including raw data) generated by Respondents, or on Respondents' behalf, during the period that this Settlement Agreement is effective, shall be submitted to EPA (in paper and electronic form according to EPA Region 5 specifications) in the next monthly progress report as described in Paragraph 36 of this Settlement Agreement (unless otherwise agreed to by EPA). EPA will make available to Respondents validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation.

b. Respondents shall verbally notify EPA and the State of Ohio at least ~~15~~ 10 days prior to conducting significant field events as described in the SOW and RI/FS Work Plan/Field Sampling Plan. At EPA's verbal or written request, or the request of EPA's oversight assistant, Respondents shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) and the State of Ohio of any samples collected by Respondents in implementing this Settlement Agreement. All split samples of Respondents shall be analyzed by the methods identified in the QAPP.

48. Access to Information

a. Respondents shall provide to EPA and the State of Ohio, upon request, copies of all records, reports, documents, and other information (including records, reports, documents, and other information in electronic form) (hereinafter referred to as "Records") within their possession or control or that of their contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondents shall also make available to EPA and the State of Ohio, for purposes of

investigation,

information gathering, or testimony, their employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

b. Respondents may assert business confidentiality claims covering part or all of the Records submitted to EPA and the State of Ohio under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Records determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies Records when they are submitted to EPA [and the State], or if EPA has notified Respondents that the Records are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R. Part 2, Subpart B, the public may be given access to such Records without further notice to Respondents. Respondents shall segregate and clearly identify all Records submitted under this Settlement Agreement for which Respondents assert business confidentiality claims.

c. Respondents may assert that certain Records are privileged under the attorney-client privilege or any other privilege or protection from disclosure recognized by federal law. If the Respondents assert such a privilege or protection in lieu of providing Records, they shall provide EPA and the State of Ohio with the following: (i) the title of the Record; (ii) the date of the Record; (iii) the name, title, affiliation (e.g., company or firm), and address of the author of the Record; (iv) the name and title of each addressee and recipient; (v) a description of the contents of the Record; and (vi) the privilege or protection asserted by Respondents. However, no Records created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

d. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other Records evidencing conditions at or around the Site.

49. In entering into this Settlement Agreement, Respondents waive any objections to any data gathered, generated, or evaluated by EPA, the State or Respondents in the performance or oversight of the Work that has been verified according to the quality assurance/quality control (“QA/QC”) procedures required by the Settlement Agreement or any EPA-approved RI/FS Work Plans or Sampling and Analysis Plans. If Respondents object to any other data relating to the RI/FS, Respondents shall submit to EPA a report that specifically identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days after the monthly progress report containing the data.

XII. SITE ACCESS AND INSTITUTIONAL CONTROLS^[LS5]

50. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by any of Respondents, such Respondents shall, commencing on the Effective Date, provide EPA, the State, and their representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

51. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondents, Respondents shall use their best efforts to obtain all necessary access agreements within ~~30~~ 45 business days after the Effective Date, or as otherwise specified in writing by the EPA Project Coordinator. Respondents shall immediately notify EPA if after using their best efforts they are unable to obtain such agreements. For purposes of this Paragraph, “best efforts” includes the payment of reasonable sums of money in consideration of access. Respondents shall describe in writing their efforts to obtain access. If Respondents cannot obtain access agreements, EPA may either (a) obtain access for Respondents or assist Respondents in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate; (b) perform those tasks or activities with EPA contractors; or (c) terminate the Settlement Agreement. Respondents shall reimburse EPA for all costs and attorney’s fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XVIII (Payment of Response Costs). If EPA performs those tasks or activities with EPA contractors and does not terminate the Settlement Agreement, Respondents shall perform all other tasks or activities not requiring access to that property, and shall reimburse EPA for all costs incurred in performing such tasks or activities. Respondents shall integrate the results of any such tasks or activities undertaken by EPA into its plans, reports, and other deliverables.

52. Notwithstanding any provision of this Settlement Agreement, EPA and the State of Ohio retains all of their access authorities and rights, as well as all of their rights to require land/water use restrictions, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

XIII. COMPLIANCE WITH OTHER LAWS

53. Respondents shall comply with all applicable local, state and federal laws and regulations when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, if the action is selected and carried out in compliance with Section 121 of CERCLA, 42 U.S.C. § 9621. Where any portion of the Work is to be conducted off-site and requires a federal or state permit or approval, Respondents shall submit timely and complete applications and take all other actions necessary to obtain and to comply with all such permits or approvals. This Settlement Agreement is not, and shall not be construed to be, a permit issued pursuant to any federal or state statute or regulation.

XIV. RETENTION OF RECORDS

54. During the pendency of this Settlement Agreement and for a minimum of 10 years after commencement of construction of any remedial action, each Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 10 years after commencement of construction of any remedial action, Respondents shall also instruct their contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

55. At the conclusion of this document retention period, Respondents shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Respondents shall deliver any such records or documents to EPA. Respondents may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege or protection from disclosure recognized by federal law. If Respondents assert such a privilege or protection, they shall provide EPA with the following: 1) the title of the document, record, or information; 2) the date of the document, record, or information; 3) the name and title of the author of the document, record, or information; 4) the name and title of each addressee and recipient; 5) a description of the subject of the document, record, or information; and 6) the privilege or protection asserted by Respondents. However, no documents, reports or other information created or generated pursuant to the requirements of this Settlement Agreement shall be withheld on the grounds that they are privileged or confidential.

56. Each Respondent hereby certifies individually that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XV. NATURAL RESOURCE DAMAGES

~~57. For the purposes of Section 113(g)(1) of CERCLA, the Parties agree that, upon the Effective Date of this Settlement Agreement for performance of an RI/FS at the Site, remedial action under CERCLA shall be deemed to be scheduled and an action for damages (as defined in 42 U.S.C. § 9601(6)) must be commenced within 3 years after the completion of the remedial action for the last operable unit at the Site.~~

XVI. DISPUTE RESOLUTION

58. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

59. If Respondents object to any EPA action taken pursuant to this Settlement Agreement, including billings for Future Response Costs, they shall notify EPA in writing of their objection(s) within 10 days of such action, unless the objection(s) has/have been resolved informally. EPA and Respondents shall have 20 days from EPA's receipt of Respondents' written objection(s) to resolve the dispute (the "Negotiation Period"). The Negotiation Period may be extended at the sole discretion of EPA. Such extension may be granted verbally but must be confirmed in writing to be effective.

60. Any agreement reached by the Parties pursuant to this Section shall be in writing and shall, upon signature by the Parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the Negotiation

Period, an EPA management official at the Superfund Branch Chief level or higher will issue a written decision. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondents' obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondents shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs. Respondents shall proceed in accordance with EPA's final decision regarding the matter in dispute, regardless of whether Respondents agree with the decision. If Respondents do not agree to perform or do not actually perform the Work in accordance with EPA's final decision, EPA reserves the right in its sole discretion to conduct the Work itself, to seek reimbursement from Respondents, to seek enforcement of the decision, to seek stipulated penalties, and/or to seek any other appropriate relief.

XVII. STIPULATED PENALTIES

61. Respondents shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 62 and 63 for failure to comply with any of the requirements of this Settlement Agreement specified below unless excused under Section XVII (Force Majeure). "Compliance" by Respondents shall include completion of the Work under this Settlement Agreement or any activities contemplated under any RI/FS Work Plan or other plan approved under this Settlement Agreement identified below, in accordance with all applicable requirements of law, this Settlement Agreement, the SOW, and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement.

62. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per day for any noncompliance identified in Subparagraph 59(b):

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 500 3,000	1 st through 21st 14 th day
\$ 1,000 7,500	22nd 15 th through 30 th day
\$ 2,000 10,000	31 st day and beyond

b. Compliance Milestones

- Timely notification to EPA in writing of names, titles and qualification of the personnel, including contractors, subcontractors, consultants, and laboratories to be used in carrying out the Work [Paragraph 24(a) and (b)].
- Submission to EPA of Respondent's designated Project Coordinator's name, address, telephone number and qualifications [Paragraph 25].

- Conduct site characterization activities as described in the SOW and RI/FS Work Plan/Field Sampling Plan [Paragraph 30].

• ~~Prepare Technical Assistance Plan [Paragraph 32(b)].~~

- Submission of Memorandum documenting need for additional data collection activities identified by Respondents [Paragraph 33(a)].
- Provide written commitment of willingness to perform additional Work identified by EPA [Paragraph 33(d)]. Provide copy of written notification to EPA of off-site shipment of Waste Material from the Site to an out-of-state waste management facility [Paragraph 34].
- Monthly Progress Reports [Paragraph 36].
- Written report due in the event of any release of a hazardous substance from the Site [Paragraph 37(b)].
- Report objecting to RI/FS data [Paragraph 49].
- Provide written description of failed efforts to obtain access [Paragraph 51].
- Payment of Future Response Costs [Paragraph 77].
- Establish escrow account in the event of any dispute over billing.

63. Stipulated Penalty Amounts - RI/FS Planning Documents, Reports and Technical Memoranda.

a. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate plans, reports, technical memoranda or other deliverables required by Section III: (Tasks 1 through 8) of the SOW in accordance with the Schedule in Exhibit A of the SOW:

<u>Penalty Per Violation Per Day</u>	<u>Period of Noncompliance</u>
\$ 500 3,000	1 st through 21st 14 th day
\$ 1,000 7,500	22nd 15 th through 30 th day
\$ 102,000,000	31 st day and beyond

64. Respondents shall be liable for stipulated penalties in the amount of \$~~250+000~~ per day for the first ~~three~~ weeks or part thereof and \$~~500~~2000 per day for each week or part thereof thereafter for failure to meet any other obligation under this Settlement Agreement including the SOW.

65. ~~In the event that EPA assumes performance of a portion or all of the Work pursuant to Paragraph 83 (Work Takeover), Respondents shall be liable for a stipulated penalty in the amount of \$50,000.~~

66. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: (a) with respect to a deficient submission under Section X (EPA Approval of Plans and Other Submissions), during the period, if any, beginning on the 31st day after EPA's receipt of such submission until the date that EPA notifies Respondents of any deficiency; and (b) with respect to a decision by the EPA Management Official at the Superfund Branch Chief level or higher, under Paragraph 60 of Section XV (Dispute Resolution), during the period, if any, beginning on the 21st day after the Negotiation Period begins until the date that the EPA management official issues a final decision regarding such dispute. Nothing in this Settlement Agreement shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

67. Following EPA's determination that Respondents have failed to comply with a requirement of this Settlement Agreement, EPA may give Respondents written notification of the same and describe the noncompliance. EPA ~~may shall~~ send Respondents a written demand for the

~~payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondents of a violation.~~

68. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondents' receipt from EPA of a demand for payment of the penalties, unless Respondents invoke the dispute resolution procedures in accordance with Section XV (Dispute Resolution). Respondents shall make all payments required by this Paragraph to EPA by Fedwire Electronic Funds Transfer to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference stipulated penalties, Site/Spill ID Number OHD980611388, and the EPA docket number for this action.

At the time of payment, Respondents shall send notice that payment has been made as provided in Paragraph 76.b below.

69. The payment of penalties shall not alter in any way Respondents' obligation to complete performance of the Work required under this Settlement Agreement.

70. Penalties shall continue to accrue as provided in Paragraph 66 during any dispute resolution period, but need not be paid until 3045 days after the dispute is resolved by agreement or by receipt of EPA's decision.

71. If Respondents fail to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondents shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 68.

72. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondents' violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Section 122(l) of CERCLA, 42 U.S.C. § 9622(l), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3). Provided, however, that EPA shall not seek civil penalties pursuant to Section 122(l) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of willful violation of this Settlement Agreement ~~or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XXI (Reservation of Rights by EPA), Paragraph 83.~~ Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XVIII. FORCE MAJEURE

73. Respondents agree to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, *force majeure* is defined as any event arising from causes beyond the control of Respondents or of any entity controlled by Respondents, including but not limited to their contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondents' best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work or increased cost of performance.

74. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondents shall notify EPA orally within 24 hours of when Respondents first knew that the event might cause a delay. Within tenfive days thereafter, Respondents shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or mitigate the delay or the effect of the delay; Respondents' rationale for attributing such delay to a *force majeure* event if they intend to assert such a claim; and a statement as to whether, in the opinion of Respondents, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall be grounds for EPA to deny Respondents an extension of time for performance. ~~preclude Respondents from asserting any claim of force majeure for that event for the period of time of such failure to comply and for any additional delay caused by such failure.~~

____ 75. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondents in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondents in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XIX. PAYMENT OF RESPONSE COSTS

76. Payment of Past Response Costs

a. Within 30 days after the Effective Date, Respondents shall pay to EPA \$ ~~1,164,095.90~~ _____ for Past Response Costs. Payment shall be made to EPA by Fedwire Electronic Funds Transfer (“EFT”) to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045
Field Tag 4200 of the Fedwire message should read “D 68010727 Environmental Protection Agency”

and shall reference Site/Spill ID Number OHD980611388 and the EPA docket number for this action.

b. At the time of payment, Respondents shall send notice that payment has been made to:

Thomas C. Nash
Site Attorney
Office of Regional Counsel
Mail Code C-14J
77 West Jackson
Chicago, IL 60604-3590

Leslie Patterson
Remedial Project Manager
Superfund Division
Mail Code SR-6J
77 West Jackson
Chicago, IL 60604-3590

and to the EPA Cincinnati Finance Center by email at cinwd_acctsreceivable@epa.gov, or by mail to:

EPA Cincinnati Finance Office
26 W. Martin Luther King Drive
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number OHD980611388 and EPA docket number for this action.

c. The total amount to be paid by Respondents pursuant to Subparagraph 76.a shall be deposited in the South Dayton Dump and Landfill Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, ~~or to be transferred by EPA to the EPA Hazardous Substance Superfund.~~

77. Payments of Future Response Costs

a. Respondents shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondents a bill requiring payment that includes Region 5's Itemized Cost Summary, which includes direct and indirect costs incurred by EPA, its contractors, and DOJ. Respondents shall make all payments within 30 days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 79 of this Settlement Agreement. Payments shall be made to EPA by Fedwire Electronic Funds Transfer ("EFT") to:

Federal Reserve Bank of New York
ABA = 021030004
Account = 68010727
SWIFT address = FRNYUS33
33 Liberty Street
New York NY 10045
Field Tag 4200 of the Fedwire message should read "D 68010727 Environmental Protection Agency"

and shall reference Site/Spill ID Number OHD980611388 and the EPA docket number for this action.

b. At the time of payment, Respondents shall send notice that payment has been made to:

Thomas C. Nash
Site Attorney
Office of Regional Counsel
Mail Code C-14J
77 West Jackson
Chicago, IL 60604-3590

Leslie Patterson
Remedial Project Manager
Superfund Division
Mail Code SR-6J
77 West Jackson
Chicago, IL 60604-3590

and to the EPA Cincinnati Finance Center by email at cinwd_acctsreceivable@epa.gov, or by mail to:

EPA Cincinnati Finance Office
26 W. Martin Luther King Drive
Cincinnati, Ohio 45268

Such notice shall reference Site/Spill ID Number OHD980611388 and EPA docket number for this action.

c. The total amount to be paid by Respondents pursuant to Subparagraph 77.a. shall be deposited in the South Dayton Dump and Landfill Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, ~~or to be transferred by EPA to the EPA Hazardous Substance Superfund.~~

78. Interest. If Respondents do not pay Past Response Costs within 30 days of the Effective Date, or do not pay Future Response Costs within 30 days of Respondents' receipt of a bill, Respondents shall pay Interest on the unpaid balance of Past Response Costs and Future Response Costs, respectively. The Interest on unpaid Past Response Costs shall begin to accrue on the Effective Date and shall continue to accrue until the date of payment. The Interest on unpaid Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. If EPA receives a partial payment, Interest shall accrue on any unpaid balance. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondents' failure to make timely payments under this Section, including but not limited to, payments of stipulated penalties pursuant to Section XVI. Respondents shall make all payments required by this Paragraph in the manner described in Paragraph 76.

79. Respondents may contest payment of any Future Response Costs under Paragraph 77 if they determine that EPA has made an accounting error or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the EPA Project Coordinator. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondents shall within the 30 day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 77. Simultaneously, Respondents shall establish an interest-bearing escrow account in a federally-insured bank duly chartered in the State of Ohio and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondents shall send to the EPA Project Coordinator a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondents shall initiate the Dispute Resolution procedures in Section XV (Dispute Resolution). If EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondents shall pay the sums due (with accrued interest) to EPA in the manner described in Paragraph 77. If Respondents prevail concerning any aspect of the contested costs, Respondents shall pay that portion of the costs (plus associated accrued interest) for which they did not prevail to EPA in the manner described in Paragraph 77. Respondents shall be disbursed

any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XV (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondents' obligation to reimburse EPA for its Future Response Costs.

XX. COVENANT NOT TO SUE BY EPA

80. In consideration of the actions that will be performed and the payments that will be made by Respondents under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondents pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work, Past Response Costs, and Future Response Costs. This covenant not to sue shall take effect upon the Effective Date. This covenant not to sue is conditioned upon the complete and satisfactory performance by Respondents of their obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Paragraph 77 (payment of Future Response Costs). This covenant not to sue extends only to Respondents and does not extend to any other person.

XXI. RESERVATIONS OF RIGHTS BY EPA

81. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondents in the future to perform additional activities pursuant to CERCLA or any other applicable law.

82. The covenant not to sue set forth in Section XX above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement is without prejudice to, all rights against Respondents with respect to all other matters, including, but not limited to:

- a. liability for a failure by Respondents to meet a requirement of this Settlement Agreement;
- b. liability for costs not included within the definitions of [Past Response Costs or] Future Response Costs;
- c. liability for performance of response action other than the Work;
- d. criminal liability;
- e. liability for violations of federal or state law that occur during or after implementation of the Work;

f. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

g. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of the Site;

h. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site not paid as Future Response Costs under this Settlement Agreement; and

i. liability for costs incurred if EPA assumes the performance of the Work pursuant to paragraph 83.

83. Work Takeover. In the event EPA determines that Respondents have ceased implementation of any portion of the Work, are seriously or repeatedly deficient or late in their performance of the Work, or are implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondents may invoke the procedures set forth in Section XV (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by EPA in performing the Work pursuant to this Paragraph shall be considered Future Response Costs that Respondents shall pay pursuant to Section XIX (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXII. COVENANT NOT TO SUE BY RESPONDENTS

84. Respondents covenant not to sue and agree not to assert any claims or causes of action against the United States, or its contractors or employees, with respect to the Work, Past Response Costs, Future Response Costs, or this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of the Work or arising out of the response actions for which the Past Response Costs or Future Response Costs have or will be incurred, including any claim under the United States Constitution, the [State] Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Work or payment of Past Response Costs or Future Response Costs.

85. These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 82 (b), (c),

and (e) - (g), but only to the extent that Respondents' claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

86. Respondents reserve, and this Settlement Agreement is without prejudice to, claims against the United States, subject to the provisions of Chapter 171 of Title 28 of the United States Code, and brought pursuant to any statute other than CERCLA or RCRA and for which the waiver of sovereign immunity is found in a statute other than CERCLA or RCRA, for money damages for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any employee of the United States, as that term is defined in 28 U.S.C. § 2671, while acting within the scope of his or her office or employment under circumstances where the United States, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred. However, the foregoing shall not include any claim based on EPA's selection of response actions, or the oversight or approval of Respondents' plans, reports, other deliverables, or activities.

87. Nothing in this Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

88. Agreement not to Challenge Listing. Respondents agree not to seek judicial review of a final rule listing the Site on the NPL at any time after the Effective Date of this Settlement Agreement based on a claim that changed site conditions that resulted from the performance of the Work in any way affected the basis for listing the Site.

89. Claims Against de Micromis Parties. Respondents agree not to assert any claims and to waive all claims or causes of action that they may have for all matters relating to the Site, including for contribution, against any person where the person's liability to Respondents with respect to the Site is based solely on having arranged for disposal or treatment, or for transport for disposal or treatment, of hazardous substances at the Site, or having accepted for transport for disposal or treatment of hazardous substances at the Site, if all or part of the disposal, treatment, or transport occurred before April 1, 2001, and the total amount of material containing hazardous substances contributed by such person to the Site was less than 110 gallons of liquid materials or 200 pounds of solid materials.

90. The waiver in Paragraph 89 shall not apply with respect to any defense, claim, or cause of action that a Respondent may have against any person meeting the above criteria if such person asserts a claim or cause of action relating to the Site against such Respondent. This waiver also shall not apply to any claim or cause of action against any person meeting the above criteria if EPA determines:

a. that such person has failed to comply with any EPA requests for information or administrative subpoenas issued pursuant to Section 104(e) or 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) or 9622(e), or Section 3007 of the Solid Waste Disposal Act (also known as the Resource Conservation and Recovery Act or "RCRA"), 42 U.S.C. § 6972, or has impeded or is impeding, through action or inaction, the performance of a response action or natural resource restoration with respect to the Site, or has been convicted of a criminal violation

for the conduct to which this waiver would apply and that conviction has not been vitiated on appeal or otherwise; or

b. that the materials containing hazardous substances contributed to the Site by such person have contributed significantly, or could contribute significantly, either individually or in the aggregate, to the cost of response action or natural resource restoration at the Site.

XXIII. OTHER CLAIMS

91. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondents.

92. Except as expressly provided in Paragraph 89 (Claims Against De Micromis Parties) and Section XIX (Covenant Not to Sue by EPA), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or cause of action against Respondents or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

93. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIV. EFFECT OF SETTLEMENT/CONTRIBUTION

94. Except as provided in Paragraph 89, nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Except as provided in Section XXII (Covenant Not to Sue by Respondents), each of the Parties expressly reserves any and all rights (including, but not limited to, pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. § 9607 and 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

95. The Parties agree that this Settlement Agreement constitutes an administrative settlement pursuant to which each Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 9622(h)(4), and is entitled, as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, or as may be otherwise provided by law, for the “matters addressed” in this Settlement Agreement. The “matters addressed” in this Settlement Agreement are the Work, Past Response Costs, and Future Response Costs.

96. The Parties further agree that this Settlement Agreement constitutes an administrative settlement pursuant to which each Respondent has, as of the Effective Date, resolved liability to the United States within the meaning of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B).

97. ~~Each Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim. Each Respondent also shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify EPA in writing within 10 days after service of the complaint or claim upon it. In addition, each Respondent shall notify EPA within 10 days after service or receipt of any Motion for Summary Judgment and within 10 days after receipt of any order from a court setting a case for trial, for matters related to this Settlement Agreement.~~^[LS6]

98. ~~In any subsequent administrative or judicial proceeding initiated by EPA, or by the United States on behalf of EPA, for injunctive relief, recovery of response costs, or other relief relating to the Site, Settling Parties shall not assert, and may not maintain, any defense or claim based upon the principles of waiver, *res judicata*, collateral estoppel, issue preclusion, claim-splitting, or other defenses based upon any contention that the claims raised in the subsequent proceeding were or should have been brought in the instant case; provided, however, that nothing in this Paragraph affects the enforceability of the covenant by EPA set forth in Section XX.~~

99. ~~Effective upon signature of this Settlement Agreement by a Respondent, such Respondent agrees that the time period commencing on the date of its signature and ending on the date EPA receives from such Respondent the payment(s) required by Section XIX (Payment of Response Costs) and, if any, Section XVII (Stipulated Penalties) shall not be included in computing the running of any statute of limitations potentially applicable to any action brought by the United States related to the “matters addressed” as defined in Paragraph 95 and that, in any action brought by the United States related to the “matters addressed,” such Respondent will not assert, and may not maintain, any defense or claim based upon principles of statute of limitations, waiver, laches, estoppel, or other defense based on the passage of time during such period. If EPA gives notice to Respondents that it will not make this Settlement Agreement effective, the statute of limitations shall begin to run again commencing ninety days after the date such notice is sent by EPA.~~^[LS7]

XXV. INDEMNIFICATION

100. Respondents shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondents agree to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondents, their officers, directors, employees, agents, contractors, subcontractors and any persons acting on their behalf or under their control, in carrying out activities pursuant to this

Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondents in carrying out activities pursuant to this Settlement Agreement. Neither Respondents nor any such contractor shall be considered an agent of the United States.

101. The United States shall give Respondents notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondents prior to settling such claim.

102. Respondents waive all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site. In addition, Respondents shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between any one or more of Respondents and any person for performance of Work on or relating to the Site.

XXVI. INSURANCE

103. At least 21 days prior to commencing any On-Site Work under this Settlement Agreement, Respondents shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of five million dollars, combined single limit, naming the United States as an additional insured. Within the same period, Respondents shall provide EPA with certificates of such insurance and a copy of each insurance policy. Respondents shall submit such certificates and copies of policies each year on the anniversary of the Effective Date. In addition, for the duration of the Settlement Agreement, Respondents shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondents in furtherance of this Settlement Agreement. If Respondents demonstrate by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondents need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVII. FINANCIAL ASSURANCE

104. Within 30 days of the Effective Date, Respondents shall establish and maintain financial security for the benefit of EPA in the amount of \$ 2,000,000 in one or more of the following forms, in order to secure the full and final completion of Work by Respondents:

- a. a surety bond unconditionally guaranteeing payment and/or performance of the Work;
- b. one or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institution(s) acceptable in all respects to EPA equaling the total estimated cost of the Work.

c. A trust fund administered by a trustee acceptable in all respects to U.S. EPA;

d. A policy of insurance issued by an insurance carrier acceptable in all respects to U.S. EPA, which ensures the payment and/or performance of the Work;

e. A written guarantee to fund or perform the Work provided by one or more parent corporations of respondents, or by one or more unrelated corporations that have a substantial business relationship with at least one of Respondents, including a demonstration that any such guarantor company satisfies the requirements of 40 C.F.R. Part 264.143(f) with respect to the Estimated Cost of the Work (plus the amount(s) of any other federal or state environmental obligations financially assured through the use of a financial test or guarantee) that it proposes to guarantee hereunder; or

f. A demonstration of sufficient financial resources to pay for the Work made by one or more Respondents, which shall consist of a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

105. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. If at any time EPA notifies Respondents that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondents shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondents' inability to demonstrate financial ability to complete the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

106. If, after the Effective Date, Respondents can show that the estimated cost to complete the remaining Work had diminished below the amount set forth in Paragraph 104 of this Section, Respondents may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondents shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondents may seek dispute resolution pursuant to Section XV (Dispute Resolution) and may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

107. Respondents may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondents may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVIII. INTEGRATION/APPENDICES

108. This Settlement Agreement, including its appendices, and any deliverables, technical memoranda, specifications, schedules, documents, plans, reports (other than progress reports), etc. that will be developed pursuant to this Settlement Agreement and become incorporated into and enforceable under this Settlement Agreement constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendix is attached to and incorporated into this Settlement Agreement:

"Appendix A" is the SOW, which includes a map of the South Dayton Dump & Landfill Site.

XXIX. ADMINISTRATIVE RECORD

109. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents shall submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Upon request of EPA, Respondents shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports.

Upon request of EPA, Respondents shall additionally submit any previous studies conducted under state, local or other federal authorities relating to selection of the response action, and all communications between Respondents and state, local or other federal authorities concerning selection of the response action. ~~At EPA's discretion, Respondents~~ shall establish a community information repository at or near the Site, to house one copy of the administrative record.

XXX. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

110. This Settlement Agreement shall be effective three days after the Settlement Agreement is signed by the Director of the Superfund Division or his/her delegate. When the Director or his/her delegate signs this Settlement Agreement, the previous 2006 Settlement Agreement, and the Dispute Resolution Agreement of 2010 incorporated therein, shall be terminated.

111. This Settlement Agreement may be amended by mutual agreement of EPA and Respondents. Amendments shall be in writing and shall be effective when signed by EPA. EPA Project Coordinators do not have the authority to sign amendments to the Settlement Agreement.

112. No informal advice, guidance, suggestion, or comment by the EPA Project Coordinator or other EPA representatives regarding reports, plans, specifications, schedules, or any other writing submitted by Respondents shall relieve Respondents of their obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXXI. NOTICE OF COMPLETION OF WORK

113. When EPA determines, that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including but not limited to payment of response costs, record retention and maintenance of institutional controls, EPA will provide written notice to Respondents. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondents, provide a list of the deficiencies, and require that Respondents modify the RI/FS Work Plan if appropriate in order to correct such deficiencies, in accordance with Paragraph 33 (Modification of any plans). Failure by Respondents to implement the approved modified RI/FS Work Plan shall be a violation of this Settlement Agreement.

The Undersigned Party enters into this Administrative Settlement Agreement and Order on Consent in the matter of the _____ Site.

Agreed this ____ day of _____, 2____.

For Respondent _____

Signature: _____

Name: _____

Title: _____

Address: _____

It is so ORDERED AND AGREED this _____ day of _____, 2____.

BY: _____ DATE: _____

Richard C. Karl, Director
Superfund Division
U.S. Environmental Protection Agency
Region 5

EFFECTIVE DATE: _____

ENCLOSURE 2

STATEMENT OF WORK FOR A REMEDIAL INVESTIGATION AND FEASIBILITY STUDY FOR OU1 AND OU2 FOR THE SOUTH DAYTON DUMP AND LANDFILL SITE MORAINE, OHIO

I. PURPOSE

This Statement of Work (SOW) sets forth the requirements for conducting a Remedial Investigation and Feasibility Study for Operable Unit One and Operable Unit Two (RI/FS) at the South Dayton Dump and Landfill Superfund Alternative Site in Moraine, Ohio (Site). The Site includes the property located at 1975 Dryden Road and any areas where hazardous substances, pollutants or contaminants from the property or from former operations at the property have or may have come to be located. The RI Report shall fully evaluate the nature and extent of hazardous substances, pollutants or contaminants at and/or from the Site. The RI Report shall also assess the risk that these hazardous substances, pollutants or contaminants present for human health and the environment. The RI Report shall provide sufficient data to develop and evaluate effective remedial alternatives. The FS Report shall evaluate alternatives for addressing the impact to human health and the environment from hazardous substances, pollutants or contaminants at the Site.

The Respondents shall prepare and complete the RI and FS Reports in compliance with the Administrative Settlement Agreement and Order on Consent (ASAOC), SOW, the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 C.F.R. Part 300) as amended and all requirements and guidance for RI/FS studies and reports, including but not limited to U. S. Environmental Protection Agency Superfund *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA* (EPA/540/G-89/004, October 1988) (RI/FS Guidance), and any other guidance that the EPA uses in conducting or submitting deliverables for a RI/FS. Exhibit B sets forth a partial list of guidance used by EPA for a RI/FS.

The Respondents shall furnish all personnel, materials, and services necessary for, or incidental to, performing the RI/FS at the Site, except as otherwise specified herein.

This SOW reflects a change in approach from that described in the 2006 ASAOC for RI/FS and SOW, and the Dispute Resolution Agreement dated December 15, 2010 for the evaluation of the nature and extent of hazardous substances or contaminants at the Site and the assessment of the risk which these hazardous substances or contaminants present for human health and the environment.

The SOW in the 2006 ASAOC directed that the RI/FS use a Presumptive Remedy approach, consistent with relevant EPA guidance, for addressing the potential risk from direct contact with the landfill contents in the central portion of the Site and a traditional RI/FS and human health and ecological risk assessment for all Site areas not addressed by the Presumptive Remedy. During the course of the RI/FS work under the 2006 ASAOC, EPA established separate operable units that were not contemplated by the 2006 ASAOC and its SOW, identifying as “OU1” a newly-defined on-Site area to be addressed by the Presumptive Remedy with respect to direct contact risk, and as “OU2”, on-Site areas not addressed by the Presumptive Remedy for direct contact risk, all groundwater, and any off-Site media requiring investigation.

The Site will be managed in two operable units (OUs), and the Respondents will perform a RI/FS for each OU consistent with EPA laws, regulations, guidance, and the requirements of the ASAOC and this SOW. The two RI/FS are intended to be performed concurrently, not sequentially. OU1, as defined in the ASAOC and this SOW, includes all areas of the Site potentially used for waste disposal where waste was disposed (see Figure 1 of this SOW) and including all media including but not limited to groundwater, leachate, landfill gas and soil vapor within and beneath the extent of the waste. This area is outlined by the green line in Figure 1. The Respondents will conduct a RI/FS for OU1 to investigate waste/fill/landfill contents, potential hot spots, groundwater contamination, and landfill gas/soil vapor in OU1 to the extent necessary to develop and evaluate remedial alternatives. OU2 will be all areas at the Site where Site-related contaminants have come to be located outside of the area defined as OU1 in this ASAOC. OU2 includes all media outside of OU1 as defined in this ASAOC in which Site-related contaminants are present, which may include: surface and subsurface soil, groundwater, landfill gas/soil vapor, surface water, sediment and air.

II. DOCUMENT REVIEW

1. The Respondents shall submit all documents or deliverables required as part of this SOW to the EPA, with a copy to the Ohio Environmental Protection Agency (OEPA), for review and approval by EPA. Documents must be submitted electronically, and the Agencies may request up to two paper copies each. Upon approval of a document, at least one paper copy of the final document will be provided to EPA and one to OEPA.
2. All deliverables submitted by the Respondents will be submitted to EPA in accordance with the schedule in Appendix A. Deliverables not described in Appendix A will be due within 15 days of EPA's request of the document unless the RPM extends that timeframe.
3. EPA, after reasonable opportunity for review and comment by OEPA, may: (a) approve, in whole or in part, the submission; (b) approve the submission upon specified conditions; (c) modify the submission to cure the deficiencies; (d) disapprove, in whole or in part, the submission, directing that Respondents modify the submission; or (e) any combination of the above. However, EPA will not modify a submission without first providing Respondents at least one notice of deficiency and opportunity to cure within 21 days, except where to do so would cause serious disruption to the Work or where previous submission(s) have been disapproved due to material defects. See Section X of the ASAOC for procedures concerning EPA Approval of Plans and Other Submissions.
4. Upon receipt of comments from EPA on a deliverable, the Respondents will submit a revised deliverable to OEPA for review and to EPA for review and approval in accordance with the schedule in Appendix A. The revised deliverable must fully and satisfactorily address each of EPA's comments on the draft deliverable. It must include a response to comments that identifies all revisions to the document and explains how the revised deliverable addresses each of EPA's comments. The Respondents will not make any change to a draft deliverable that is not a direct result of addressing agency comments unless the change is identified in the response to comments. These requirements also apply to any subsequent revisions.

III. SCOPE

Respondents shall complete the following tasks as part of this RI/FS:

- Task 1: Project Scoping and RI/FS Planning Documents
- Task 2: Community Relations ~~and Technical Assistance Plan~~
- Task 3: Site Characterization
- Task 4: Remedial Investigation Report
- Task 5: Treatability Studies
- Task 6: Development and Screening of Alternatives (Technical Memorandum)
- Task 7: Detailed Analysis of Alternatives (Feasibility Study Report)
- Task 8: Progress Reports

The numbers following the section headings below refer to the relevant sections of the RI/FS Guidance.

TASK 1: PROJECT SCOPING AND RI/FS PLANNING DOCUMENTS (2)

1.1 Site Background (2.2)

The Respondents will evaluate existing planning documents and revise them to be consistent with this SOW. All tasks below are relevant to OU1 and OU2 unless otherwise stated.

1.1.1 Collect and Analyze Existing Data (2.2.2)

The Respondents will analyze the existing Site background information and review the site conceptual model to determine if modifications are needed.

1.1.2 Refine and Document Preliminary Remedial Action Objectives and Alternatives (2.2.3)

The respondent will review and, if necessary, refine the remedial action objectives that have been identified by EPA for each actually or potentially contaminated medium, listed below. The revised remedial action objectives will be documented in a technical memorandum subject to EPA approval. The respondent will then identify a preliminary range of broadly defined potential remedial action alternatives and associated technologies. The range of potential alternatives should encompass where appropriate, alternatives in which treatment significantly reduces the toxicity, mobility, or volume of the waste; alternatives that involve containment with little or no treatment; and a no-action alternative.

The preliminary RAOs for the OU1 remedial action, based on currently available information (these RAOs may be revised based on the findings of the RI), are:

- 1) Prevent unacceptable risks to human health from exposure to landfill contents;
- 2) Prevent unacceptable risks to human health from exposure to contaminated soil;
- 3) Prevent unacceptable risks to human health from exposure to contaminated groundwater;
- 4) Prevent unacceptable risks to human health from exposure to landfill gas and soil vapor;
- 5) Treat or eliminate high levels of hazardous substances, pollutants, or contaminants that cannot be reliably contained (hot spots) in accordance with applicable Superfund requirements;
- 6) Minimize infiltration that results in contaminant leaching to groundwater above regulatory or risk-based requirements;
- 7) Control surface water runoff and erosion;
- 8) Prevent unacceptable risks to human health from exposure to migration of contaminated groundwater and leachate migrating beyond the OU1 boundary of the landfill;
- 9) Prevent unacceptable risks to human health from exposure to migration of landfill gas and soil vapor migrating beyond the OU1 boundary of the landfill;

-The preliminary RAOs for the OU2 remedial action, based on currently available information, are:

- 1) Prevent unacceptable risks to human health from exposure to contaminated soil;
- 2) Prevent unacceptable risks to human health from exposure to contaminated groundwater;
- 3) Prevent unacceptable risks to human health from exposure to landfill gas and soil vapor;
- 4) Prevent unacceptable risks to human health and the environment from exposure to contaminated surface water and sediments;
- 5) -Prevent the discharge of contaminated groundwater into surface water bodies above regulatory or risk based requirements;
- 6) Restore groundwater quality to regulatory or risk-based requirements wherever practicable within a reasonable time frame.

1.1.3 Evaluate the Need for Treatability Studies (2.2.4)

If the Respondents or EPA identify remedial actions that involve treatment, the Respondents will conduct treatability studies unless the Respondents satisfactorily demonstrate to EPA that such studies are not needed. When treatability studies are needed, the Respondents will plan initial treatability testing activities (such as research and study design) to occur concurrently with Site characterization activities (see Task 3) to the extent possible.

1.1.4 Begin Preliminary Identification of Potential ARARs (2.2.5)

The Respondents will review the potential state and federal ARARs (chemical-specific, location-specific and action-specific) identified thus far and determine whether the list is adequate given the preliminary remedial action objectives and remedial alternatives and ARARs associated with

particular actions. ARAR identification will continue as Site conditions, contaminants, and remedial action alternatives are better defined.

1.1.5 Identify Data Needs (2.2.6) and Design a Data Collection Program (2.2.7)

Initially, the Respondents will identify data needs by revising the DQOs for the remaining work in OU1 and for OU2, and design a data collection program appropriate to the data needs. EPA may require and the Respondents may propose additional technical memoranda or work plan revisions to address additional data collection activities. In any event, the Respondents are responsible for fulfilling the additional data and analysis needs identified by EPA consistent with the general scope and objectives of this RI/FS.

Initially, and for each phase of fieldwork, the Respondents will develop strategies for sampling and analysis that specify the sampling design, sampling method, sample numbers, types and locations. This information will be presented in a technical memorandum or RI/FS Work Plan revision that documents the data need.

1.2 RI/FS Planning Documents (Work Plan/Field Sampling Plan/QAPP) (2.3)

1.2.1 General Requirements

Within ~~4530~~ calendar days after the effective date of the ASAOC, the Respondents will submit draft RI/FS Planning Documents (including the ***RI/FS Work Plan(s), Field Sampling Plan, Quality Assurance Project Plan, and Health and Safety Plan***) to EPA, with a copy to OEPA, for review and approval by EPA. ^[LS1]

The objective of the RI/FS Planning Documents is to develop an RI/FS strategy and general management plan that accomplishes the following:

- A remedial investigation that fully determines the nature and extent of the release or threatened release of hazardous substances, pollutants, or contaminants at and from the Site. In performing this investigation, the Respondents shall gather sufficient data, samples, and other information to fully characterize the nature and extent of the contamination at the Site, to support the human health and ecological risk assessments, and to provide sufficient data for the identification and evaluation of remedial alternatives for this Site.
- A feasibility study that identifies and evaluates alternatives for remedial action to protect human health and the environment by preventing, eliminating, controlling or mitigating the release or threatened release of hazardous substances, pollutants, or contaminants at and from the Site.

When scoping the specific aspects of the project, the Respondents shall meet with EPA to discuss all project planning decisions and special concerns associated with the Site.

The RI/FS Planning Documents shall include a detailed description of the tasks the Respondents shall perform, the information needed for each task, a detailed description of the information the Respondents shall produce during and at the conclusion of each task, and a description of the

work products that the Respondents shall submit to EPA and OEPA. This includes the deliverables set forth in this SOW; a schedule for each of the required activities consistent with the RI/FS Guidance and other relevant guidance; and a project management plan including a data management plan (e.g., requirements for project management systems and software, minimum data requirements, requirements for submittal of electronic data, data format and backup data management), monthly reports to EPA and OEPA, and meetings and presentations to EPA and OEPA at the conclusion of each major phase of the RI/FS. The Respondents shall refer to Appendix B of the RI/FS Guidance for a description of the required contents of the RI/FS Planning Documents.

The RI/FS Planning Documents shall include the preliminary objectives for the remedial action at the Site; preliminary potential state and federal ARARs (chemical-specific, location-specific and action-specific); a description of the Site management strategy developed by the Respondents and EPA during scoping; a preliminary identification of remedial alternatives; and data needs for fully characterizing the nature and extent of the contamination at the site, evaluating risks and developing and evaluating remedial alternatives. The RI/FS Planning Documents shall reflect coordination with treatability study requirements, if any. The RI/FS Planning Documents shall also include a process for and manner of refining and/or identifying additional Federal and State ARARs, and for preparing the human health and ecological risk assessments and the feasibility study.

The Respondents shall prepare the RI/FS Planning Documents as described in *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, October, 1988. The documents shall include those identified in Sections 1.2.2 through 1.2.5.

1.2.2 OU1 and OU2 RI/FS Work Plan(s) (2.3.1 and Appendix B)

The Respondents will submit revised ***RI/FS Work Plan(s)*** for OU1 and OU2 that include(s) a comprehensive description of the work to be performed and a corresponding schedule for completion. The respondent will refer to Appendix B of the RI/FS Guidance for a comprehensive description of the contents of the required work plan.

Because of the unknown nature of the site and iterative nature of the RI/FS, additional data requirements and analyses may be identified throughout the process. The ~~R~~espondents will submit a technical memorandum documenting the need for additional data, and identifying the DQOs whenever such requirements are identified. In any event, the ~~R~~espondents is are responsible for fulfilling additional data and analysis needs identified by EPA consistent with the general scope and objectives of this RI/FS.

1.2.2.1 Site Background

The Site Background section shall include a brief summary of the Site location, description, physiography, hydrology, geology, demographics, ecological, cultural and natural resource features, Site history, description of previous investigations and responses conducted at the Site by local, state, federal, or private parties, and Site data evaluations and project planning completed during the scoping process.

The Site background section shall discuss the locations of existing groundwater monitoring wells, if any, and previous surface water, sediment, soil, groundwater, and air sampling locations. The Site Background section shall include a summary description of available data and identify areas where hazardous substances, pollutants or contaminants were detected and the detected levels. The Site Background section shall include tables displaying the minimum and maximum levels of detected hazardous substances, pollutants or contaminants in Site areas and media.

The RI/FS Work Plan will be accompanied by a relational database of all Site analytic data collected under CERCLA authority to date.

1.2.2.2 Data Gap Description/Data Acquisition

As part of the RI/FS Work Plan, the Respondents shall analyze the currently available data. The Respondents shall identify those areas of the Site and nearby areas that require data and evaluation in order to define the extent of hazardous substances, pollutants or contaminants. This Section of the RI/FS Work Plan shall include a description of the number, types, and locations of samples to be collected. The RI/FS Work Plan shall include an environmental program to accomplish the following:

- Conduct Site Reconnaissance. The Respondent(s) shall conduct (or have conducted):
 - Site surveys including property, boundary, utility rights-of-way, and topographic information
 - Land Survey
 - Topographic Mapping
 - Field Screening
- Conduct Geological Investigations (Soils and Sediments). The Respondent(s) shall conduct geological investigations to determine the extent of hazardous substances, pollutants or contaminants in surface soils, subsurface soils and sediments at the Site. As part of this geological investigation Respondents shall:
 - Collect Surface Soil Samples
 - Collect Subsurface Soil Samples
 - Perform Soil Boring and Permeability Sampling
 - Collect Sediments Samples
 - Survey Soil Gases
 - Test Pit
 - Identify real-world horizontal, vertical, and elevation coordinates for all samples and site features in accordance with EPA Region 5 electronic data requirements
- Air Investigations. If determined to be necessary, -Tthe Respondent(s) shall conduct air investigations to determine the extent of atmospheric hazardous substances, pollutants or contaminants at and from the Site, which shall include:
 - Collect Air Samples
 - Establish Air Monitoring Station

- Hydrogeological Investigations (Ground Water). The Respondent(s) shall conduct hydrogeological investigations of ground water to determine the horizontal and vertical distribution of hazardous substances, pollutants or contaminants in the groundwater and the extent, fate and transport of any groundwater plumes containing hazardous substances, pollutants or contaminants. The hydrogeological investigation shall include:
 - Install Well Systems
 - Collect Samples from Upgradient, Downgradient, Private and Municipal wells
 - Collect Samples During Drilling (e.g., HydroPunch or Equivalent)
 - Perform Hydraulic Tests (such as Pump Tests, Slug Tests and Grain Size Analyses)
- Measure Ground-Water Elevations and determine horizontal and vertical sample locations in accordance with EPA Region 5 electronic data requirements
 - Modeling
 - Determine the direction of regional and local groundwater flow
 - Identify the local uses of groundwater including the number, location, depth and use of nearby private and municipal wells
- Conduct Hydrogeological Investigations (Surface Water). The Respondent(s) shall conduct hydrogeological investigations to determine the nature and extent of contamination of surface water from the Site. The hydrogeological investigation shall include:
 - Collect Samples
 - Measure Surface-Water Elevation
- Conduct Ecological Investigation. If determined to be necessary, ~~The~~ Respondent(s) shall conduct ecological investigations to assess the impact to aquatic and terrestrial ecosystems from the disposal, release and migration of hazardous substances, pollutants or contaminants at the Site including:
 - Wetland and Habitat Delineation
 - Wildlife Observations
 - Community Characterization
 - Endangered Species Identification
 - Biota Sampling and Population Studies
- Collect Contaminated Building Samples. If determined to be necessary, ~~The~~ Respondent(s) shall collect contaminated building samples.
- Dispose of Investigation-Derived Waste. The Respondents shall characterize and dispose of investigation-derived wastes in accordance with local, state, and federal regulations as specified in the FSP (see the Fact Sheet, Guide to Management of Investigation-Derived Wastes, 9345.3-03FS (January 1992)).

- Evaluate and Document the Need for Treatability Studies. If the Respondents or EPA identify remedial actions that involve treatment, the Respondents shall include treatability studies as outlined in Task 5 of this SOW unless the Respondents satisfactorily demonstrate to EPA that such studies are not needed. When treatability studies are needed, the Respondents shall plan initial treatability testing activities (such as research and study design) to occur concurrently with Site characterization activities, to the extent possible.

1.2.3 Field Sampling Plan

Respondents shall prepare the **Field Sampling Plan** (FSP) to ensure that sample collection and analytical activities are conducted in accordance with technically acceptable protocols and that the data meet the Site-specific Data Quality Objectives as established in the Quality Assurance Project Plan (QAPP), and OU1 and OU2 RI/FS Work Plan(s). All sampling and analyses performed shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control (QA/QC), data validation, and chain of custody procedures.

Upon request by EPA, the Respondents shall allow EPA or its authorized representatives to take split and/or duplicate samples of any samples collected by the Respondents or their contractors or agents. The Respondents shall notify EPA not less than 15 business days in advance of any sample collection activity. EPA shall have the right to take any additional samples that it deems necessary.

1.2.4 Quality Assurance Project Plan

The Respondents shall review the Site-specific **Quality Assurance Project Plan** (QAPP) covering sample analysis and data handling for the samples and data collected during the RI/FS for both OU1 and OU2. If needed, the Respondents will revise the QAPP in accordance with the *Region 5 Instructions on the Preparation of a Superfund Division Quality Assurance Project Plan Based on EPA QA/R-5; EPA Requirements for Quality Assurance Project Plans* (QA/R-5, EPA/240/B-01/003, March 2001); and *EPA Guidance for Quality Assurance Project Plans* (QA/G-5, EPA/600/R-02/009, December 2002).

The Respondents shall demonstrate, in advance to EPA's satisfaction, that each laboratory it may use is qualified to conduct the proposed work. This includes use of methods and analytical protocols for the chemicals of concern in the media sampled within detection and quantification limits consistent with both QA/QC procedures and data quality objectives (DQO) approved in the QAPP for the Site by EPA. The laboratory must have and follow an approved QA program. If a laboratory not in the Contract Laboratory Program is selected, methods consistent with CLP methods that would be used at this Site for the purposes proposed and QA/QC procedures approved by EPA shall be used. The Respondents shall only use laboratories which have a documented Quality Assurance Program which complies with ANSI/ASQC E-4 1994, *Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs*, (American National Standard, January 5, 1995) and *EPA Requirements for Quality Management Plans* (QA/R-2) (EPA/240/B-01-002, March 2001) or equivalent documentation as determined by EPA.

Upon request by EPA, the Respondents shall have such a laboratory analyze samples submitted by EPA for quality assurance monitoring. The Respondents shall provide EPA with the QA/QC

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procedures followed by all sampling teams and laboratories performing data collection and/or analysis. The Respondents shall also ensure the provision of analytical tracking information consistent with OSWER Directive No. 9240.0-2B, *Extending the Tracking of Analytical Services to PRP-Lead Superfund Sites*.

1.2.5 Health and Safety Plan (2.3.3 and Appendix B)

The Respondents will prepare a ***Health and Safety Plan*** that conforms to their health and safety program and complies with the Occupational Safety and Health Administration (OSHA) regulations and protocols outlined in 29 C.F.R. Part 1910. The Health and Safety Plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). The Health and Safety Plan will include the 11 elements described in the RI/FS Guidance such as a health and safety risk analysis, a description of monitoring and personal protective equipment, medical monitoring, and Site control. EPA does not approve the Respondent's Health and Safety Plan, but rather EPA reviews it to ensure that all the necessary elements are included, and that the plan provides for the protection of human health and the environment, and after that review provides comments as may be necessary and appropriate. The safety plan must, at a minimum, follow the EPA's guidance document *Standard Operating Safety Guides* (Publication 9285.1-03, PB92-963414, June 1992).

TASK 2: Community Relations Support and Technical Assistance Plan

EPA has the responsibility of developing and implementing community involvement activities for the Site. The critical community involvement planning steps performed by EPA and OEPA include conducting community interviews and developing a Community Involvement Plan. Although implementing the Community Involvement Plan is the responsibility of EPA, the Respondents, if directed by EPA, shall assist by providing information regarding the Site's history; participating in public meetings; assisting in preparing fact sheets for distribution to the general public; or conducting other activities approved by EPA. All PRP-conducted community involvement activities shall be planned and developed in coordination with EPA.

~~If requested by EPA, the Respondents shall prepare a ***Technical Assistance Plan*** (TAP) that will provide and administer \$50,000 for a qualified community group to hire Technical Advisors, independent from the Respondents, to help interpret and comment on Site-related documents developed under this SOW and through EPA's issuance of the Record of Decision. Within 30 days after a request by EPA, the Respondents shall submit to EPA its Technical Assistance Plan for Agency approval.~~

~~As part of the TAP, the Respondents shall propose methods, including an application process, minimum eligibility requirements and selection criteria for awarding, and administering the funds above.~~

~~Any eligible group shall be: 1) a group of people who may be affected by a release or threatened release at the Site; 2) incorporated as a nonprofit organization for the purposes of the Site or otherwise established as a charitable organization that operates within the geographical range of the Site and is already incorporated as a nonprofit organization; and 3) able to demonstrate its capability to adequately and responsibly manage any funds awarded. Any group is ineligible if it is: 1) a potentially responsible party (PRP) at the Site or represents such a PRP or is a group~~

~~whose ability to represent the interests of the affected individuals might be limited as a result of receiving money or services from a PRP; 2) affiliated with a national organization; 3) an academic institution; 4) a political subdivision; or 5) a group established or presently sustained by government entities, a PRP, or any ineligible entity. Selection criteria should be consistent with 40 C.F.R. §35.4155. Funds may be awarded to only one qualified group at a time for purposes of this AOC and SOW.~~

~~Also as part of the TAP, Respondents shall include a proposed plan for documenting the eligibility of the selected community group, and informing the group and EPA if it believes any individual member is ineligible (consistent with 40 C.F.R. §35.4030) to participate in the group. Respondents shall also include a plan for informing the selected group of the activities that can and cannot be undertaken with Respondent's [s'] funds. The lists of eligible and ineligible activities should be consistent with 40 C.F.R. §35.4070 and §35.4075, respectively. The TAP shall also include a proposal for offering and, if accepted, transferring up to \$5,000 to the selected group to cover its estimated need for funds for an initial start-up period.~~

~~Also as part of the TAP, Respondents shall include a plan for providing assistance to the selected community group in the solicitation for an independent Technical Advisor. As long as the group documents its selection and the advisor selected by the group satisfies the requirements specified in 40 C.F.R. §35.4190 and §35.4195, Respondents shall accept the group's choice. Finally, Respondents shall include a proposed plan for negotiating a contract with the selected community organization and the independent Technical Advisor. The contract shall specify the duties of the Respondents, community group, and Technical Advisor, respectively, and establish a dispute resolution process. Respondents should consider using the attached draft contract as a starting point for negotiations. Respondents shall notify EPA of any differences between the final contract and the attached draft contract.~~

~~The Respondents may hire a third party to coordinate and administer the TAP (hereinafter referred to as the TAP Coordinator). However, any such TAP Coordinator shall be approved by EPA. It is the Respondent's [s'] burden to demonstrate that the TAP Coordinator is qualified to perform this task. If the Respondents opts to hire a TAP Coordinator, then it shall submit in writing that person's name, title, and qualifications to EPA within 15 days of the effective date of this Consent Order. Additionally, the Respondents shall designate within 15 days of the effective date of this Consent Order an outreach coordinator who will be responsive to the public's inquiries and questions about the Site, including information about the application process and administration of the TAP. Respondents shall also propose a plan for arranging for and hosting meetings between its Outreach Coordinator, the community group, the Technical Advisor, and other interested individuals.~~

~~The Respondents shall provide EPA quarterly progress reports regarding the implementation of the TAP. To the extent practicable, the Respondents shall: 1) select the TAP recipient; 2) release an initial \$5,000 in start-up expenses; 3) confirm the Technical Advisor selection; and 4) finalize the contract with the community group and its advisor.~~

~~If the Community Group demonstrates, consistent with the criteria specified in 40 C.F.R. §35.4065, that it needs additional funds for TAP activity, then Respondents will provide the~~

~~additional monies needed. Any unobligated funds shall revert to the Respondents upon EPA's issuance of the ROD based upon the RI/FS to be conducted pursuant to this SOW.~~

~~Within 30 calendar days of EPA's approval of the TAP, the Respondents shall select the TAP recipient; release \$5,000 in start-up funds; confirm the selection of the Technical Advisor, and finalize an appropriate contract with the selected community representative and the Technical Advisor. In addition, the Respondents shall provide EPA and state agency with quarterly progress reports concerning the implementation of the TAP.~~

TASK 3: Site Characterization (3)

3.1 Investigate and Define Site Physical and Biological-Environmental Characteristics (3.2.1.2)

The Respondents shall implement the RI/FS Planning Documents and collect data on the physical and biological-environmental characteristics of the site and its surrounding areas including the ~~physical~~ physiography, geology, and hydrology, ~~and specific physical characteristics~~. This information will be ascertained through a combination of physical measurements, observations, and sampling efforts and will be utilized to define potential transport pathways and human ecological receptor populations. In defining the site's physical characteristics the Respondents will also obtain sufficient engineering data (such as pumping characteristics) for the projection of contaminant fate and transport, and development and screening of remedial action alternatives, including information to assess treatment technologies.

The Respondents shall provide the RPM or the entity designated by the RPM with a pdf copy and an electronic copy (according to EPA Region 5 format specification) of laboratory data within the monthly progress reports and in no event later than 90 days after samples are shipped for analysis. In addition, the monthly progress reports will summarize field activities (including drilling locations, depths and field notes if requested by RPM), problems encountered, solutions to problems, and upcoming field activities.

3.2 Define Sources of Contamination (3.2.3)

The respondent shall conduct sufficient sampling to define the boundaries of the contaminant sources to the level established in the QA/QC plan and DQOs. Defining the source of contamination will include analyzing the potential for contaminant release (e.g., long term ~~-leaching~~ from soil), contaminant mobility and persistence, and characteristics important for evaluating remedial actions, including information to assess treatment technologies. The Respondents will locate and characterize all hot spots, defined as highly toxic and highly mobile material that presents a potential principal threat to human health or the environment and would likely threaten the integrity of the containment system if it were left in place. A hot spot should be large enough that its remediation or removal would significantly reduce the risk posed by the overall site, small enough that it is reasonable to consider removal or treatment, and located in a discrete, accessible part of the landfill.

3.3 Describe the Nature and Extent/Fate and Transport of Contamination (3.2.4)

The Respondents shall gather information to describe the nature and extent of contamination as a final step during the field investigation. To describe the nature and extent of contamination, the

Respondents will utilize the information on site physical and biological characteristics and sources of contamination to give a preliminary estimate of the contaminants that may have migrated. The Respondents will then implement an iterative monitoring program and any study program identified in the work plan or sampling plan such that by using analytical techniques sufficient to detect and quantify the concentration of contaminants, the migration of contaminants through the various media at site can be determined. In addition, the Respondents shall gather data for calculations of contaminant fate and transport. This process is continued until the area and depth of contamination are known to the level of contamination established in the QAPP and DQOs.

3.3.1 Evaluate site characteristics (3.4.1)

The Respondents will analyze and evaluate the data to describe: (1) site physical and ~~biological~~ environmental characteristics, (2) contaminant source characteristics, (3) nature and extent of contamination and (4) contaminant fate and transport. Results of the site physical characteristics, source characteristics, and extent of contamination analyses are utilized in the analysis of contaminant fate and transport. The Respondents shall evaluate the actual and potential magnitude of releases from the sources, and horizontal and vertical spread of contamination as well as mobility and persistence of contaminants. Where modeling is appropriate, such models shall be identified to EPA and the state in a technical memorandum prior to their use. All data and programming, including any proprietary programs, shall be made available to EPA and the state together with a sensitivity analysis. The RI data shall be presented electronically according to EPA Region 5 format requirements. Analysis of data collected for site characterization will meet the DQOs developed in the QAPP and stated in the FSP (or revised during the RI).

3.3.2 Iterative Site Characterization Deliverables

If multiple, iterative phases of fieldwork are conducted, the Respondents will prepare an *Interim Field Investigation Technical Memorandum* to the Agencies for review and EPA Approval after each discrete phase. The Interim Field Investigation Technical Memorandum will review the investigative activities that were performed in the fieldwork phase, describe and display the site data collected, update the site conceptual model, identify data gaps, and propose the next phase of data collection activities (if needed).

3.3.3 Site Characterization Technical Memorandum (3.7.2)

After the final phase of field sampling and analysis for each OU, the Respondents will prepare and submit a *Site Characterization Technical Memorandum*. This summary will review the investigative activities that have taken place, and describe and display site data documenting the location and characteristics of surface and subsurface features and contamination at the site including the affected medium, location, types, physical state, concentration of contaminants and quantity. In addition, the location, dimensions, physical condition and varying concentrations of each contaminant throughout each source and the extent of contaminant migration through each of the affected media will be documented. Respondents will address each of EPA's comments on the Site Characterization TM in the draft RI Report (Task 4).

3.3.4 Current and Future Land Uses and Reuse Assessment

The Respondents shall prepare a ***Current and Future Land Uses and Reuse Memorandum*** that evaluates the current and reasonably anticipated future land uses at the Site. The Memorandum shall identify: 1) past uses at the site including title and lien information; 2) current uses of the site and neighboring areas; 3) the owner's plans for the site following cleanup and any prospective purchasers; 4) applicable zoning laws and ordinance; 5) current zoning; 6) applicable local area land use plans, master plans and how they affect the site; 7) existing local restrictions on property; 8) property boundaries; 9) groundwater use determinations, wellhead protection areas, recharge areas and other areas identified in the state's Comprehensive Ground Water Protection Program; 10) Flood plains, wetland, or endangered or threatened species; and 11) utility rights of way.

If EPA, in its sole discretion, determines that a Reuse Assessment is necessary, Respondents will perform the ***Reuse Assessment*** in accordance with EPA guidance, including, but not limited to: *Reuse Assessments: A Tool To Implement The Superfund Land Use Directive* (OSWER 9355.7-06P, June 4, 2001) upon request of EPA. The Reuse Assessment should provide sufficient information to develop realistic assumptions of the reasonably anticipated future uses for the Site.

3.3.5 Baseline Human Health Risk Assessment

As an attachment to the RI Report for each OU, the Respondents shall submit a ***Baseline Human Health Risk Assessment Report*** (BHHRA) to EPA, with a copy to OEPA, for review and approval by EPA. The Respondents shall conduct the baseline risk assessment to determine whether site contaminants pose a current or potential risk to human health and the environment in the absence of any remedial action. The major components of the Baseline Risk Assessment include contaminant identification, exposure assessment, toxicity assessment, and human health and ecological risk characterization.

Respondents shall conduct a baseline human health risk assessment that focuses on actual and potential risks to persons coming into contact with on-site hazardous substances, pollutants or contaminants as well as risks to the nearby residential, recreational and industrial worker populations from exposure to hazardous substances, pollutants or contaminants in groundwater, soils, sediments, surface water, air, and ingestion of contaminated organisms in nearby, impacted ecosystems. The human health risk assessment shall define central tendency and reasonable maximum estimates of exposure for current land use conditions and reasonable future land use conditions. The human health risk assessment shall use data from the Site and nearby areas to identify the contaminants of concern (COC), provide an estimate of how and to what extent human receptors might be exposed to these COCs, and provide an assessment of the health effects associated with these COCs. The human health risk assessment shall project the potential risk of health problems occurring if no cleanup action is taken at the Site and/or nearby areas, and establish target action levels for COCs (carcinogenic and non-carcinogenic).

Respondents shall conduct the human health risk assessment in accordance with EPA guidance including, at a minimum: *Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part A), Interim Final* (EPA-540-1-89-002, OSWER Directive 9285.7-01A, December 1, 1989); and *Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of*

Superfund Risk Assessments), *Interim*, (EPA 540-R-97-033, OSWER 9285.7-01D, January, 1998) or subsequently issued guidance.

Respondents shall also conduct the human health risk assessment in accordance with the following additional guidance found in the following OSWER directives:

- 1) “Clarification to the 1994 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities,” OSWER Directive 9200.4-27; August, 1998;
- 2) “Implementation of the Risk Assessment Guidance for Superfund (RAGS) Volume I - Human Health Evaluation Manual, (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments) (Interim),” OSWER Directive 9285.7-01D-1; December 17, 1997;
- 3) “Soil Screening Guidance: Technical Background Document,” OSWER Directive 9355.4-17A; May 1, 1996 and “Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites, OSWER Directive 9355.4; March 24, 2001;
- 4) “Soil Screening Guidance: User’s Guide,” Publication 9355.4-23; April, 1996;
- 5) “Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities,” OSWER Directive 9355.4-12; July 14, 1994;
- 6) “Guidance Manual for the Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children,” Publication 9285.7-15-1; February, 1994, and associated, clarifying Short Sheets on IEUBK Model inputs, including but not limited to OSWER 9285.7-32 through 34, as listed on the OSWER lead internet site at www.epa.gov/superfund/programs/lead/prods.htm;
- 7) “Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children,” Version 0.99D, NTIS PB94-501517, 1994 or “Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children,” Windows© version, 2001;
- 8) “Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual: (Part B, Development of Risk-based Preliminary Remediation Goals),” Interim, OSWER Directive 9285.7-01B; December, 1991;
- 9) “Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors,” OSWER Directive 9285.6-03; March 25, 1991; and
- 10) “Exposure Factors Handbook,” Volumes I, II, and III; August 1997 (EPA/600/P-95/002Fa,b,c).

Respondents shall also comply with the guidance on assessing human health risk associated with adult exposures to lead in soil as found in the following document: “Recommendations of the Technical Review Workgroup for Lead for an Interim Approach to Assessing Risks Associated with Adult Exposures to Lead in Soil,” December, 1996. Respondents shall also comply with the

“Superfund Lead-Contaminated Residential Sites Handbook,” December 2002 by the EPA Lead Sites Workgroup.

Additional applicable or relevant guidance may be used only if approved by EPA. Respondents shall prepare the Human Health Risk Assessment Report according to the guidelines outlined below:

- Hazard Identification (sources). The Respondents shall review available information on the hazardous substances present at the site and identify the major contaminants of concern.
- Dose-Response Assessment. The Respondents shall select contaminants of concern based on their intrinsic toxicological properties.
- Conceptual Exposure/Pathway Analysis. The Respondents shall identify and analyze critical exposure pathways (e.g., drinking water). The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.
- Characterization of Site and Potential Receptors. The Respondents shall identify and characterize human populations in the exposure pathways.
- Exposure Assessment. The exposure assessment will identify the magnitude of actual or potential human exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the Respondents shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the site.
- Risk Characterization. During risk characterization, Respondents shall compare chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These comparisons shall determine whether concentrations of contaminants at or near the site are affecting or could potentially affect human health.
- Identification of Limitations/Uncertainties. The Respondents shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
- Site Conceptual Model. Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, the Respondents shall develop a conceptual model of the site.

3.3.6 Baseline Ecological Risk Assessment

As an attachment to the RI Report for each OU, the Respondents shall submit a ***Baseline Ecological Risk Assessment Report*** (BERA) to EPA, with a copy to OEPA, for review and approval by EPA. In the BERA, the Respondents shall evaluate and assess the risk to the environment posed by site contaminants. Respondents shall prepare the BERA in accordance with EPA guidance including, at a minimum: *Ecological Risk Assessment Guidance for Superfund, Process for Designing and Conducting Ecological Risk Assessments* (EPA-540-R-97-006, June 1997, OSWER Directive 9285.7-25). The BERA shall evaluate both current and potential future risks to ecosystems (e.g., eventual surface water and groundwater transport to the Great Miami River and other ecosystems) and shall follow the guidelines outlined below:

- Hazard Identification (sources). The Respondents shall review available information on the hazardous substances present at the site and identify the major contaminants of concern.
- Dose-Response Assessment. The Respondents must select contaminants of concern based on their intrinsic toxicological properties.
- Conceptual Exposure/Pathway Analysis. Critical exposure pathways (e.g., surface water) shall be identified and analyzed. The proximity of contaminants to exposure pathways and their potential to migrate into critical exposure pathways shall be assessed.
- Characterization of Site and Potential Receptors. The Respondents shall identify and characterize environmental exposure pathways.
- Selection of Chemicals, Indicator Species, and End Points. In preparing the assessment, the Respondents will select representative chemicals, indicator species (species that are especially sensitive to environmental contaminants), and end points on which to concentrate.
- Exposure Assessment. In the exposure assessment, Respondents must identify the magnitude of actual or environmental exposures, the frequency and duration of these exposures, and the routes by which receptors are exposed. The exposure assessment shall include an evaluation of the likelihood of such exposures occurring and shall provide the basis for the development of acceptable exposure levels. In developing the exposure assessment, the Respondents shall develop reasonable maximum estimates of exposure for both current land use conditions and potential land use conditions at the site.
- Toxicity Assessment/Ecological Effects Assessment. The toxicity and ecological effects assessment will address the types of adverse environmental effects associated with chemical exposures, the relationships between magnitude of exposures and adverse effects, and the related uncertainties for contaminant toxicity (e.g., weight of evidence for a chemical's carcinogenicity).
- Risk Characterization. During risk characterization, Respondents shall compare chemical-specific toxicity information, combined with quantitative and qualitative information from the exposure assessment, to measured levels of contaminant exposure levels and the levels predicted through environmental fate and transport modeling. These

comparisons shall determine whether concentrations of contaminants at or near the site are affecting or could potentially affect the environment.

- Identification of Limitations/Uncertainties. The Respondents shall identify critical assumptions (e.g., background concentrations and conditions) and uncertainties in the report.
- Site Conceptual Model. Based on contaminant identification, exposure assessment, toxicity assessment, and risk characterization, the Respondents shall develop a conceptual model of the site.

TASK 4: Remedial Investigation (RI) Report (3.7.3)

For each OU, within ~~90~~ 60 calendar days following receipt of EPA's comments on the Site Characterization Technical Memorandum, the Respondents shall submit to EPA for review and approval, with a copy to OEPA, an **RI Report** addressing all of the Site and nearby areas. The RI Report shall be consistent with the ~~ASA~~ AOC and this SOW. The RI Report shall accurately establish the site characteristics such as media contaminated, extent of contamination, and the physical boundaries of the contamination. Pursuant to this objective, the Respondents shall endeavor to obtain only the essential amount of detailed data necessary to determine the key contaminant(s) movement and extent of contamination. The key contaminant(s) must be selected based on persistence and mobility in the environment and the degree of hazard. The key contaminant(s) identified in the RI shall be evaluated for receptor exposure and an estimate of the key contaminant(s) level reaching human or environmental receptors must be made. The Respondents shall use existing standards and guidelines such as drinking-water standards, water-quality criteria, and other criteria accepted by the EPA as appropriate for the situation may be used to evaluate effects on human receptors who may be exposed to the key contaminant(s) above appropriate standards or guidelines. Respondents shall complete the RI Report in accordance with the following requirements:

The Respondents shall submit an RI Report to EPA for review and approval pursuant to Section II, which includes the following:

- Executive Summary
- Site Background. The Respondent(s) shall assemble and review available facts about the regional conditions and conditions specific to the site under investigation.
- Investigation
 - Site Reconnaissance
 - Field Investigation & Technical Approach
 - Chemical Analysis & Analytical Methods
 - Field Methodologies
 - Biological (if necessary)
 - Surface Water
 - Sediment
 - Soil Boring

- Soil Sampling
 - Monitoring Well Installation
 - Groundwater Sampling
 - Hydrogeological Assessment
 - Air Sampling (if necessary)
 - Waste Investigation
 - Geophysical Investigation
- Site Characteristics
 - Geology
 - Hydrogeology
 - Meteorology
 - Demographics and Land Use
 - Ecological Assessment
 - Nature and Extent of Contamination
 - Contaminant Sources
 - Contaminant Distribution and Trends
 - Fate and Transport
 - Contaminant Characteristics
 - Transport Processes
 - Contaminant Migration Trends
 - Human Risk Assessment
 - Hazard Identification (sources)
 - Dose-Response Assessment
 - Prepare Conceptual Exposure/Pathway Analysis
 - Characterization of Site and Potential Receptors
 - Exposure Assessment
 - Risk Characterization
 - Identification of Limitations/Uncertainties
 - Site Conceptual Model
 - Ecological Risk Assessment (OU2 only)
 - Hazard Identification (sources)
 - Dose-Response Assessment
 - Prepare Conceptual Exposure/Pathway Analysis
 - Characterization of Site and Potential Receptors
 - Selection of Chemicals, Indicator Species, and End Points
 - Exposure Assessment
 - Toxicity Assessment/Ecological Effects Assessment
 - Risk Characterization

- Identification of Limitations/Uncertainties
- Site Conceptual Model
- Summary and Conclusions

TASK 5: Treatability Studies (5)

If EPA or the Respondents determine that treatability testing is necessary, the Respondents shall conduct treatability studies as described in this Task 5 of this SOW. In addition, if applicable, the Respondents shall use the testing results and operating conditions in the detailed design of the selected remedial technology.

5.1 Determine Candidate Technologies and of the Need for Testing

The Respondents shall submit to EPA for review and approval, with a copy to OEPA, a ***Candidate Technologies and Testing Needs Technical Memorandum*** that identifies candidate technologies for a treatability studies program commensurate with the Alternatives Screening Technical Memorandum ~~no later than at the time of submittal of the draft RI Report~~. The list of candidate technologies shall cover the range of technologies required for alternatives analysis. The Respondents shall determine and refine the specific data requirements for the testing program during Site characterization and the development and screening of remedial alternatives.

5.1.1 Conduct Literature Survey and Determine the Need for Treatability Testing

Within the Candidate Technologies and Testing Needs Technical Memorandum, the Respondents shall conduct a literature survey to gather information on the performance, relative costs, applicability, removal efficiencies, operation and maintenance (O&M) requirements, and implementability of candidate technologies. Respondents shall conduct treatability studies except where Respondents can demonstrate to EPA's satisfaction that they are not needed.

5.2 Treatability Testing and Deliverables (5.5, 5.6 and 5.8)

If treatability testing is needed, the Respondents will also prepare and submit a Treatability Study Work Plan, a Sampling and Analysis Plan, a Health and Safety Plan and a Treatability Evaluation Report.

5.2.1 Treatability Testing Work Plan and Sampling and Analysis Plan (5.5)

If EPA determines that treatability testing is necessary, EPA will decide on the type of treatability testing to use (e.g., bench versus pilot). Within ~~60~~ 30 days of a request from EPA, the Respondents shall submit a ***Treatability Testing Work Plan*** and a ***SAP***, or amendments to the original RI/FS Work Plan(s), FSP and QAPP, to EPA with a copy to OEPA for review and approval by EPA, that describes the Site background, the remedial technology(ies) to be tested, test objectives, experimental procedures, treatability conditions to be tested, measurements of performance, analytical methods, data management and analysis, health and safety, and residual waste management. The Respondents shall document the DQOs for treatability testing as well. If pilot scale treatability testing is to be performed, the Treatability Study Work Plan shall describe pilot plant installation and start-up, pilot plant operation and maintenance procedures, operating

conditions to be tested, a sampling plan to determine pilot plant performance, and a detailed health and safety plan. If testing is to be performed off-Site, the plans shall address all permitting requirements. The requirements of SAPs are outlined in Tasks 1.2.3 and 1.2.4 of this SOW.

5.2.2 Treatability Study Health and Safety Plan (5.5)

If treatability testing is necessary and If the original Health and Safety Plan is not adequate for defining the activities to be performed during the treatability tests, the Respondents shall submit a separate or amended **Health and Safety Plan**. Task 1.2.2 of this SOW provides additional information on the requirements of the Health and Safety Plan. EPA and OEPA review, but do not approve the Treatability Study Health and Safety Plan.

5.2.3 Treatability Study Evaluation Report (5.6)

If treatability testing is necessary, Following the completion of the treatability testing, the Respondents will analyze and interpret the testing results in a **Treatability Study Evaluation Report** to OEPA for review and to EPA for review and approval. ~~Depending on the sequence of activities, this report may be a part of the Site Characterization Technical Memorandum (3.3.3), the RI Report (Task 4) or will be~~ submitted as a separate deliverable. The Treatability Study Evaluation Report will evaluate each technology's effectiveness, implementability and cost, and actual results as compared with predicted results. The report will also evaluate full scale application of the technology, including a sensitivity analysis identifying the key parameters affecting full-scale operation.

TASK 6: Development and Screening of Remedial Alternatives (4)

The Respondents shall develop and screen an appropriate range of remedial alternatives that will be evaluated by the Respondents. This range of alternatives shall include, as appropriate, options in which treatment is used to reduce the toxicity, mobility, or volume of wastes, but which vary in the types of treatment, the amount treated, and the manner in which long-term residuals or untreated wastes are managed; options involving containment with little or no treatment; options involving both treatment and containment; and a no-action alternative.

Potential Remedial Alternatives for OU1 will be screened and developed in accordance with *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites* (EPA/540/P-91/001, February 1991).

The Respondents will perform the following activities as a function of the development and screening of remedial alternatives.

6.1 Alternatives Development and Screening Deliverables

The Respondents shall prepare and submit two technical memoranda for this task: a Remedial Action Objectives Technical Memorandum, and an Alternatives Screening Technical Memorandum.

6.1.1 Remedial Action Objectives Technical Memorandum (4.2.1)

Based on the BLRA, the Respondents will review and if necessary modify the site-specific remedial action objectives, specifically the PRGs that were established by EPA, in consultation with OEPA, prior to or during negotiations between EPA and the Respondents. The Respondents will document the revised RAOs in a ***Remedial Action Objectives Technical Memorandum*** to OEPA for review and to EPA for review and approval. These modified RAOs will specify the contaminants and media of interest, exposure pathways and receptors, and an acceptable contaminant level or range of levels (at particular locations for each exposure route).

6.1.2 Alternatives Screening Technical Memorandum (4.5)

The Respondents shall submit an ***Alternatives Screening Technical Memorandum*** to EPA with a copy to OEPA for review and comment by EPA. The Alternatives Screening Technical Memorandum shall summarize the development and screening of an appropriate range of remedial alternatives, and shall include an alternatives array summary. The Alternatives Screening Technical Memorandum shall document the methods, the rationale and the results of the alternatives screening process. If required by EPA, the Respondents shall modify the alternatives array to assure that the array identifies a complete and appropriate range of viable alternatives to be considered in the detailed analysis. The Respondents shall incorporate any modifications, as directed by EPA, in the Comparative Analysis of Alternatives Technical Memorandum (Task 7.1.2).

6.1.2.1 Develop General Response Actions (4.2.2)

In the Alternatives Screening Technical Memorandum, the Respondents shall develop general response actions for each medium of interest including containment, treatment, excavation, pumping, or other actions, organized by medium (soil, waste, groundwater, air, etc.), to satisfy the EPA-approved remedial action objectives.

6.1.2.2 Identify Areas or Volumes of Media (4.2.3)

In the Alternatives Screening Technical Memorandum, the Respondents shall identify areas or volumes of media to which the general response actions may apply, taking into account requirements for protectiveness as identified in the remedial action objectives. The Respondents shall also take into account the chemical and physical characterization of the Site.

6.1.2.3 Identify, Screen, and Document Remedial Technologies (4.2.4 and 4.2.5)

In the Alternatives Screening Technical Memorandum, the Respondents shall identify and evaluate technologies applicable to each general response action to eliminate those that cannot be implemented at the Site. The Respondents shall refine applicable general response actions to specify remedial technology types. The Respondents shall identify technology process options for each of the technology types concurrently with the identification of such technology types or following the screening of considered technology types. The Respondents shall evaluate process options on the basis of effectiveness, implementability, and cost factors to select and retain one or, if necessary, more representative processes for each technology type. The Respondents shall summarize and include the technology types and process options in the Alternatives Screening Technical Memorandum. Whenever practicable, the alternatives shall also consider the CERCLA preference for treatment over conventional containment or land disposal approaches.

In the Alternatives Screening Technical Memorandum, Respondents shall provide a preliminary list of alternatives to address the relevant contaminated media (soil, sediments, surface water, groundwater, air, etc.) at the Site that shall consist of, but is not limited to, treatment technologies, removal and off-site treatment/disposal, removal and on-site disposal, and in-place containment for soils, sediments, and wastes. See 40 C.F.R. § 300.430(e)(1)-(7). The Respondents shall specify the reasons for eliminating any alternatives.

6.1.2.4 Assemble and Document Alternatives (4.2.6)

The Respondents shall assemble the selected representative technologies into alternatives for each affected medium or operable unit. Together, all of the alternatives shall represent a range of treatment and containment combinations that shall address the operable unit as a whole. The Respondents shall prepare a summary of the assembled alternatives and their related ARARs for the Alternatives Screening Technical Memorandum. The Respondents shall specify the reasons for eliminating alternatives during the preliminary screening process.

The Respondents shall refine the remedial alternatives to identify the volumes of contaminated media addressed by the proposed processes and size critical unit operations as necessary. The Respondents shall collect sufficient information for an adequate comparison of alternatives. The Respondents shall also modify the remedial action objectives for each chemical in each medium as necessary to incorporate any new human health and ecological risk assessment information presented in the Respondents' risk assessment or evaluation reports. Additionally, the Respondents shall update ARARs as the remedial alternatives are refined.

6.1.2.5 Conduct and Document Screening Evaluation of Each Alternative (4.3)

The Respondents may perform a final screening process based on short and long term aspects of effectiveness, implementability, and relative cost. Generally, this screening process is only necessary when there are many feasible alternatives available for a detailed analysis. If necessary, the Respondents shall conduct the screening of alternatives to assure that only the alternatives with the most favorable composite evaluation of all factors are retained for further analysis. As appropriate, the screening shall preserve the range of treatment and containment alternatives that was initially developed. The range of remaining alternatives shall include options that use treatment technologies and permanent solutions to the maximum extent practicable. The Respondents shall prepare an Alternatives Screening Technical Memorandum that summarizes the results and reasoning employed in screening; arrays the alternatives that remain after screening; and identifies the action-specific ARARs for the alternatives that remain after screening.

TASK 7: Detailed Analysis of Alternatives - FS Report (6)

The Respondents shall conduct and present a detailed analysis of remedial alternatives to provide EPA with the information needed to select a Site remedy.

7.1 Detailed Analysis of Alternatives (6.2)

The Respondents shall conduct a detailed analysis of the remedial alternatives for each OU of the Site. The detailed analysis shall include an analysis of each remedial option against each of the

nine evaluation criteria set forth in 40 C.F.R. § 300.430(e)(9)(iii) and a comparative analysis of all options using the same nine criteria as a basis for comparison.

7.1.1 Apply Nine Criteria in the Individual Analysis of Alternatives (6.2.1-6.2.4)

The Respondents shall apply the nine evaluation criteria to the assembled remedial alternatives to ensure that the selected remedial alternative will protect human health and the environment and meet remedial action objectives; will comply with, or include a waiver of, ARARs; will be cost-effective; will utilize permanent solutions and alternative treatment technologies, or resource recovery technologies, to the maximum extent practicable; and will address the statutory preference for treatment as a principal element. The evaluation criteria include: (1) overall protection of human health and the environment and how the alternative meets each of the remedial action objectives; (2) compliance with ARARs; (3) long-term effectiveness and permanence; (4) reduction of toxicity, mobility, or volume; (5) short-term effectiveness; (6) implementability; (7) cost; (8) state (or support agency) acceptance; and (9) community acceptance. (Note: criteria 8 and 9 are considered after the RI/FS report has been released to the general public.) For each alternative the Respondents shall provide: (1) a description of the alternative that outlines the waste management strategy involved and identifies the key ARARs associated with each alternative, and (2) a discussion of the individual criterion assessment. If the Respondents do not have direct input on criteria (8) state (or support agency) acceptance and (9) community acceptance, EPA will address these criteria.

7.1.2 Compare Alternatives against Each Other and Document the Comparison of Alternatives (6.2.5 and 6.2.6)

The Respondents shall perform a comparative analysis between the remedial alternatives. That is, the Respondents shall compare each alternative against the other alternatives using the evaluation criteria as a basis of comparison. EPA will identify and select the preferred alternative. The Respondents shall prepare a ***Comparative Analysis of Alternatives Technical Memorandum*** which summarizes the results of the comparative analysis and fully and satisfactorily addresses and incorporates EPA's comments on the Alternatives Screening Technical Memorandum. The Respondents shall incorporate EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum in the draft FS Report.

7.1.2.1 Alternatives Analysis for Institutional Controls

For any alternative that relies on Institutional Controls, Respondents shall include in the Alternatives Screening Technical Memorandum, Comparative Analysis of Alternative Technical Memorandum and Feasibility Study an evaluation of the following: 1) Overall Protection of Human Health and the Environment including what specific institutional control components will ensure that the alternative will remain protective and how these specific controls will meet remedial action objectives; 2) Compliance with ARARs; 3) Long Term Effectiveness including the adequacy and reliability of institutional controls and how long the institutional control must remain in place; 4) Short Term Effectiveness including the amount of time it will take to impose the Institutional Control; 5) Implementability including research and documentation that the proper entities (e.g., potentially responsible parties, state, local government entities, local landowners conservation organizations) are willing to enter into any necessary agreement or restrictive covenant with the proper entities and/or that laws governing the restriction exist or

allow implementation of the institutional control; 6) Cost including the cost to implement, maintain, monitor and enforce the institutional control; 7) State and Community acceptance of the Institutional Control.

7.2 Feasibility Study Report (6.5)

Within ~~630~~ days after receipt of EPA's comments on the Comparative Analysis of Alternatives Technical Memorandum, the Respondents shall prepare and submit a draft **FS Report** to EPA for its review pursuant to Section II. The FS report shall summarize the development and screening of the remedial alternatives and present the detailed analysis of remedial alternatives. In addition, the FS Report shall also include the information EPA will need to prepare relevant sections of the Record of Decision (ROD) for the Site [see Chapters 6 and 9 of EPA's *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents* (EPA 540-R-98-031, July 1999) for the information that is needed].

Following comment by EPA on the draft FS Report, the Respondents will prepare a final FS Report which fully and satisfactorily addresses each of EPA's comments on the draft FS Report. The Respondents will submit the final FS Report to OEPA for review and to EPA for review and comment or approval in accordance with the schedule in Exhibit A. Any subsequent revisions to the FS Report that are required will be in accordance with the schedule in Exhibit A.

TASK 8: Progress Reports

The Respondents shall submit monthly written progress reports to EPA and OEPA concerning actions undertaken pursuant to the ASAOC and this SOW, beginning 30 calendar days after the effective date of the ASAOC, until the termination of the ASAOC, unless otherwise directed in writing by the RPM. These reports shall include, but not be limited to, a description of all significant developments during the preceding period, including the specific work that was performed and any problems that were encountered; ~~a paper and~~ electronic copies (formatted according to EPA specifications) and summary of the analytical data that was received during the reporting period (as necessary); and the developments anticipated during the next reporting period, including a schedule of work to be performed, anticipated problems, and actual or planned resolutions of past or anticipated problems. ~~The monthly progress reports will summarize the field activities conducted each month including, but not limited to drilling and sample locations, depths and descriptions; boring logs; sample collection logs; field notes; problems encountered; solutions to problems; a description of any modifications to the procedures outlined in the RI/FS Work Plan, the FSP, QAPP or Health and Safety Plan, with justifications for the modifications; a summary of all data received during the reporting period and the analytical results; and upcoming field activities. In addition, the Respondents shall provide the RPM or the entity designated by the RPM with all laboratory data within the monthly progress reports and in no event later than 60 days after samples are shipped for analysis.~~ [LS2]

Figure 1: Site location and OU1 Boundary

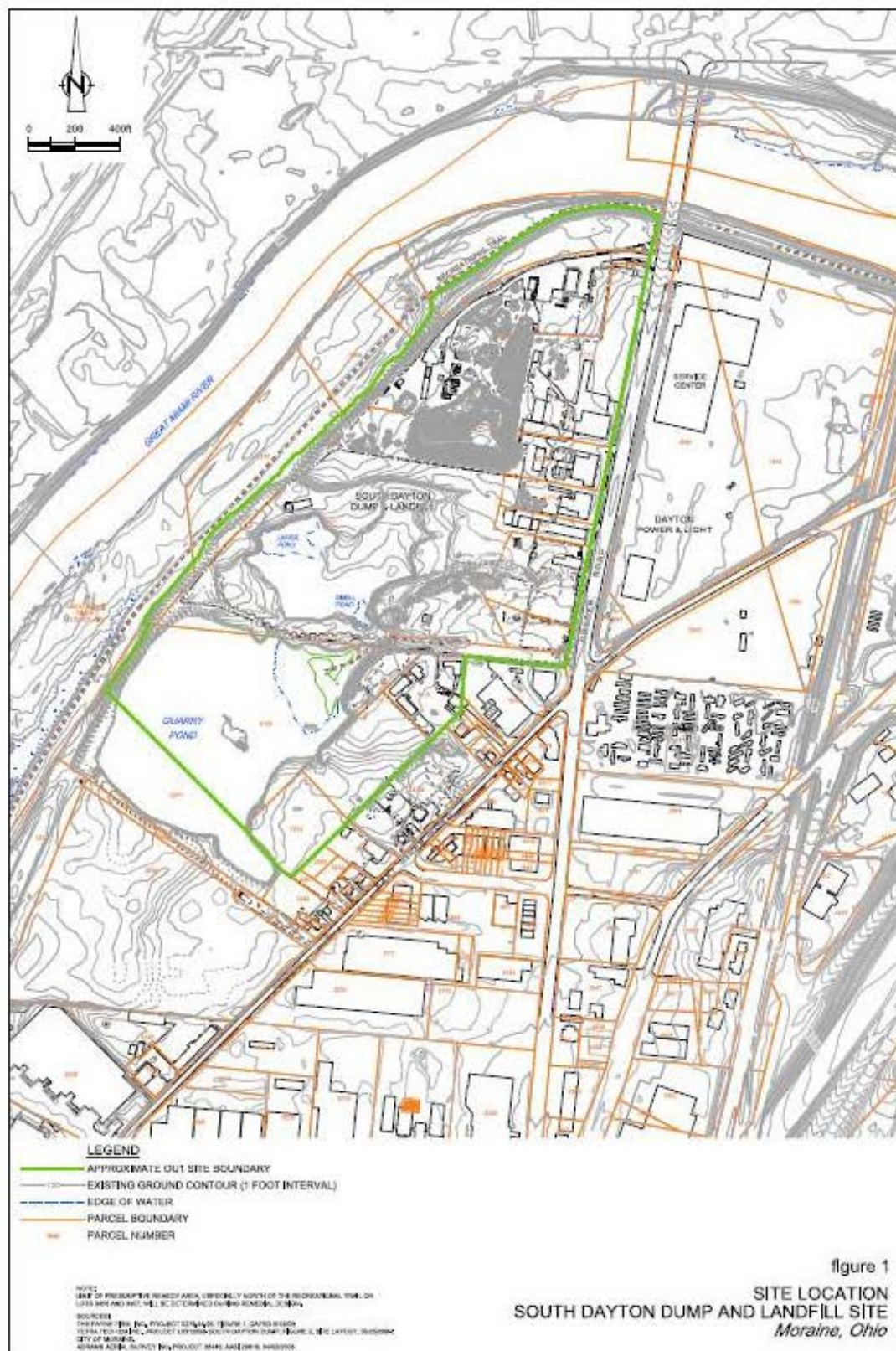


EXHIBIT A
SCHEDULE FOR MAJOR DELIVERABLES

Deliverables are relevant for both OUs unless specified otherwise in this table. All timeframes are in calendar days.

DELIVERABLE	DUE DATE
Task 1.2.2 – OU1 and OU2 RI/FS Work Plan(s)	Revised RI/FS Work Plan(s) due 30 <u>45</u> days after the effective date of the ASAOC. Final Work Plan(s) due 21 days after receipt of EPA’s comments on the draft RI/FS Work Plan(s). Any subsequent revisions, if required, are
Task 1.2.3 - Field Sampling Plan	Revised FSP (or statement that the existing FSP is sufficient for planned RI/FS activities) due 30 <u>45</u> days after the effective date of the ASA <u>SA</u> OC. Final FSP due 30 <u>21</u> days after receipt of EPA’s comments on the draft Field Sampling Plan. Any subsequent revisions, if required, are due
Task 1.2.4 - Quality Assurance Project Plan and Quality Management Plan(s)	Revised QAPP (or statement that the existing QAPP is sufficient for planned RI/FS activities) due 30 <u>45</u> days the effective date of the ASA <u>SA</u> OC. Final QAPP due 30 <u>21</u> days after receipt of EPA’s comments on the draft QAPP. Any subsequent revisions, if required, are due within 21 days of receipt of EPA’s comments.
Task 1.2.5- Health and Safety Plan	Draft H&S Plan (or statement that the existing H&S Plan is sufficient for planned RI/FS activities) due 45 <u>30</u> days after effective date of the ASA <u>SA</u> OC. Final H&S Plan due 30 <u>21</u> days after receipt of EPA’s comments on the draft H&S plan. Any subsequent revisions, if required, are due within 21 days of receipt of EPA’s comments.
TASK 2 – Technical Assistance Plan	Draft TAP due 30 days after a request by EPA. Final TAP due 21 days after receipt of EPA’s comments.
TASK 2 – Quarterly TAP Reports	Reports are due on the 15th day of each month after the end of the quarter (April 15, July 15, October 15, and January 15).
Task 3.3.2 - Interim Field Investigation Technical Memorandum	Draft report/work plan due 60 days after the end of fieldwork. Final report/work plan due 30 <u>21</u> days after receipt of EPA’s comments. Any subsequent revisions, if required, are due within 21 days of receipt of EPA’s comments.
Task 3.3.3– Site Characterization Technical Memorandum	Draft Memorandum due 60 days after the end of the final phase of fieldwork.
Task 3.3.4 - Current and Future Land Uses and Reuse Memorandum	Draft Memorandum due 60 days after the end of the final phase of fieldwork. Any subsequent revisions, if required, are due within 21 days of receipt of EPA’s comments.

DELIVERABLE	DUE DATE
Task 3.3.4 – Reuse Assessment (if needed)	If requested by EPA, the draft Reuse Assessment is due 30 days <u>after a request by EPA</u> .
Tasks 3.3.5 and 3.3.6 - Baseline Human Health and Ecological Risk Assessment Report	Draft BLRA Report is due with the draft RI Report. Final BLRA Report is due with the final RI Report. Any subsequent revisions, if required, are due within 45 <u>21</u> days of receipt of EPA’s comments.
TASK 4 TASK 4- RI Report	Draft RI Report due 90 <u>60</u> days after receipt of EPA’s comments on the Site Characterization Technical Memorandum (Task 3.3.3). Final RI Report due 21 <u>45</u> days after receipt of EPA’s comments on the draft RI Report. Any subsequent revisions, if required, are due within 21 <u>30</u> days of receipt of EPA’s comments.
Task 5.1 - Candidate Technologies and Testing Needs Technical Memorandum	During Task 1 - Project Planning, or early enough in the RI/FS to avoid potential delays in the FS.
Task 5.2.1 - Draft and Final Treatability Testing Work Plan and SAP or Amendments to the Original RI/FS Work Plan, FSP and/or QAPP.	Within 30 <u>60</u> days of receipt of comments on the Candidate Technologies and Testing Needs Technical Memorandum (Task 5.1), or 30 <u>60</u> days of request from EPA.
Task 5.2.2 - Draft and Final Treatability Testing Health and Safety Plan or Amendment to the Original Health and Safety Plan	With the Treatability Testing Work Plan (Task 5.2.1)
Task 5.2.3 - Draft and Final Treatability Study Evaluation Report	Draft Report due with the Preliminary Site Characterization Summary (Task 3.3.3), the RI Report (TASK 4), or <u>in accordance with the schedule in the</u> 120 <u>days from approval of the</u> Treatability Testing Work
Task 6.1.1 - Remedial Action Objectives Technical Memorandum	Draft RAO TM due 30 <u>60</u> days after receipt of EPA’s comments on the draft RI Report (Task 4). Final RAO TM due 21 <u>30</u> days after receipt of EPA’s approval of the RI
Task 6.1.2 - Alternatives Screening Technical Memorandum	Draft due 30 <u>60</u> days after receipt of EPA’s approval of the RAO TM (Task 6.1.1). Revised (if required) due 21 <u>30</u> days
Task 7.1.2- Comparative Analysis of Alternatives Technical Memorandum	Draft due 21 <u>60</u> days after receipt of EPA’s comments on the Alternatives Screening Technical Memorandum (Task 6.1.2) and EPA’s direction to prepare the Comparative
Task 7.2 - FS Report	Draft FS Report due 30 <u>60</u> days after receipt of EPA’s comments on the Comparative Analysis of Alternatives Technical Memorandum (Task 7.1.2). Final RI <u>FS</u> Report due 21 <u>45</u> days after receipt of EPA’s comments on the draft FS Report. Any subsequent revisions, if required, are due within 21 <u>30</u> days of receipt of EPA’s comments.

DELIVERABLE	DUE DATE
TASK 8 - Monthly Progress Reports	On the 15 th day of each month or the first business day after the 15 th of the month commencing 30 days after the effective date of the <u>ASA</u> OC.
Miscellaneous Documents	In accordance with the submittal date provided by RPM

EXHIBIT B
PARTIAL LIST OF GUIDANCE

The following list, although not comprehensive, comprises many of the regulations and guidance documents that apply to the RI/FS process. The majority of these guidance documents, and additional applicable guidance documents, may be downloaded from the following websites:

<http://www.epa.gov/superfund/pubs.htm> (General Superfund)

<http://clu.in.org> (Site Characterization, Monitoring and Remediation)

<http://www.epa.gov/ORD/NRMRL/Pubs> (Site Characterization and Monitoring)

http://www.epa.gov/quality/qa_docs.html#guidance (Quality Assurance)

<http://www.epa.gov/superfund/programs/risk/toolthh.htm> (Risk Assessment - Human)

<http://www.epa.gov/superfund/programs/risk/tooleco.htm> (Ecological Risk Assessment)

<http://www.epa.gov/superfund/programs/lead> (Risk Assessment - Lead)

<http://cfpub.epa.gov/ncea> (Risk Assessment - Exposure Factors/Other)

<http://www.epa.gov/nepis/srch.htm> (General Publications Clearinghouse)

<http://www.epa.gov/clariton/clhtml/pubtitle.html> (General Publications Clearinghouse)

1. The (revised) National Contingency Plan;
2. *Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA*, EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9355.3-01, EPA/540/G-89/004, October 1988.
3. *Conducting Remedial Investigations/Feasibility Studies for CERCLA Municipal Landfill Sites*, EPA, Office of Emergency and Remedial Response, EPA/540/P-91/001, February 1991.
4. *Field Analytical and Site Characterization Technologies Summary of Applications*, EPA, EPA-542-F-97-024, November 1997.
5. *CLU-IN Hazardous Waste Clean-Up Information World Wide Web Site*, EPA, EPA-542-F-99-002, February 1999.
6. *Field Sampling and Analysis Technology Matrix and Reference Guide*, EPA, EPA-542-F-98-013, July 1998.
7. *Subsurface Characterization and Monitoring Techniques: A Desk Reference Guide*, Volumes 1 and 2, EPA, EPA/625/R-93/003, May 1993.

8. Use of Airborne, Surface, and Borehole Geophysical Techniques at Contaminated Sites: A Reference Guide, EPA, EPA/625/R-92/007(a,b), September 1993.
9. Innovations in Site Characterization: Geophysical Investigation at Hazardous Waste Sites, EPA, EPA-542-R-00-003, August 2000.
10. Innovative Remediation and Site Characterization Technology Resources, EPA, OSWER, EPA-542-F-01-026b, January 2001.
11. Handbook of Suggested Practices for the Design and Installation of Ground-Water Monitoring Wells, EPA, EPA/600/4-89/034, 1991.
12. Ground-Water Sampling Guidelines for Superfund and RCRA Project Managers, EPA, EPA-542-S-02-001, May 2002.
13. Ground Water Issue: Low-Flow (Minimal Drawdown) Ground-Water Sampling Procedures, EPA, EPA/540/S-95/504, April 1996.
14. Superfund Ground Water Issue: Ground Water Sampling for Metals Analysis, EPA, EPA/540/4-89/001, March 1989.
15. Resources for Strategic Site Investigation and Monitoring, EPA, OSWER, EPA-542-F-010030b, September 2001.
16. Region 5 Framework for Monitored Natural Attenuation Decisions for Groundwater, EPA Region 5, September 2000.
17. Ground Water Issue: Suggested Operating Procedures for Aquifer Pumping Tests, EPA, OSWER, EPA/540/S-93/503, February 1993.
18. Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water, EPA, EPA/600/R-98/128, September 1998.
19. Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action and Underground Storage Tank Sites, EPA, OSWER Directive 9200.4-17P, April 21, 1999.
20. Ground Water Issue: Fundamentals of Ground-Water Modeling, EPA, OSWER, EPA/540/S-92/005, April 1992.
21. *Assessment Framework for Ground-Water Model Applications*, EPA, OSWER Directive #9029.00, EPA-500-B-94-003, July 1994.
22. Ground-Water Modeling Compendium - Second Edition: Model Fact Sheets, Descriptions, Applications and Cost Guidelines, EPA, EPA-500-B-94-004, July 1994.
23. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*, EPA, Office of Solid Waste and Emergency Response, OSWER Directive No. 9200.1-23P, EPA 540-R-98-031, July 1999.

24. Region 5 Instructions on the Preparation of A Superfund Division Quality Assurance Project Plan Based on EPA QA/R-5, Revision 0, EPA Region 5, June 2000.
25. Guidance for the Data Quality Objectives Process (QA-G-4), EPA, EPA/600/R-96/055, August 2000.
26. Guidance for the Data Quality Objectives Process for Hazardous Waste Sites (QA/G-4HW), EPA, EPA/600/R-00/007, January 2000.
27. Guidance for the Preparation of Standard Operating Procedures (QA-G-6), EPA, EPA/240/B-01/004, March 2001.
28. EPA Requirements for Quality Management Plans (QA/R-2), EPA, EPA/240/B-01/002, March 2001.
29. EPA Requirements for QA Project Plans (QA/R-5), EPA, EPA/240/B-01/003, March 2001.
30. Guidance for Quality Assurance Project Plans (QA/G-5), EPA, EPA/600/R-98/018, February 1998.
31. *Users Guide to the EPA Contract Laboratory Program*, EPA, Sample Management Office, OSWER Directive No. 9240.0-01D, January 1991.
32. Technical Guidance Document: Quality Assurance and Quality Control for Waste Containment Facilities, EPA, EPA/600/R-93/182, 1993.
33. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part A), EPA, EPA/540/1-89/002, December 1989.
34. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part B, Development of Risk-Based Preliminary Remediation Goals), EPA, EPA/540/R-92/003, OSWER Publication 9285.7-01B, December 1991.
35. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part C, Risk Evaluation of Remedial Alternatives), EPA, Office of Emergency and Remedial Response, Publication 9285.7-01C, October, 1991.
36. Risk Assessment Guidance for Superfund: Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments), EPA, Office of Emergency and Remedial Response, Publication 9285.7-47, December 2001.
37. Risk Assessment Guidance for Superfund: Volume III - Part A, Process for Conducting Probabilistic Risk Assessment, EPA, OSWER Publication 9285.7-45, EPA-540-R-02-002, December 2001.

38. Policy for Use of Probabilistic in Risk Assessment at the U.S. Environmental Protection Agency, EPA, Office of Research and Development, 1997.
39. Human Health Evaluation Manual, Supplemental Guidance: Standard Default Exposure Factors, EPA, OSWER Directive 9285.6-03, March 25, 1991.
40. *Exposure Factors Handbook*, Volumes I, II, and III, EPA, EPA/600/P-95/002Fa,b,c, August 1997.
41. Supplemental Guidance to RAGS: Calculating the Concentration Term, EPA, OSWER Publication 9285.7-08I, May 1992.
42. Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, EPA, OSWER Directive 9355.4-12, EPA/540/F-94/043, July 14, 1994.
43. Clarification to the 1994 Revised Interim Soil Lead Guidance for CERCLA Sites and RCRA Corrective Action Facilities, EPA, OSWER Directive 9200.4-27, EPA/540/F-98/030, August 1998.
44. *Guidance Manual for the Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children*, EPA, OSWER Publication 9285.7-15-1, February 1994; and associated, clarifying Short Sheets on IEUBK Model inputs, including but not limited to OSWER 9285.7-32 through 34, as listed on the OSWER lead internet site at www.epa.gov/superfund/programs/lead/prods.htm.
45. Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children, Version 0.99D, NTIS PB94-501517, 1994 or Integrated Exposure Uptake Biokinetic (IEUBK) Model for Lead in Children, Windows© version, 2001,
46. Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions, EPA, OSWER Directive 9355.0-30, April 22, 1991.
47. Performance of Risk Assessments in Remedial Investigation /Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs), OSWER Directive No. 9835.15, August 28, 1990.
48. Supplemental Guidance on Performing Risk Assessments in Remedial Investigation Feasibility Studies (RI/FSs) Conducted by Potentially Responsible Parties (PRPs), OSWER Directive No. 9835.15(a), July 2, 1991.
49. Role of Background in the CERCLA Cleanup Program, EPA, OSWER 9285.6-07P, April 26, 2002.
50. *Soil Screening Guidance: User's Guide*, EPA, OSWER Publication 9355.4-23, July 1996.
51. Soil Screening Guidance: Technical Background Document, EPA, EPA/540/R95/128, May 1996.

52. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites (Peer Review Draft), EPA, OSWER Publication 9355.4-24, March 2001.
53. Ecological Risk Assessment Guidance for Superfund: Process for Designing & Conducting Ecological Risk Assessments, EPA, OSWER Directive 9285.7-25, EPA-540-R-97-006, February 1997.
54. Guidelines for Ecological Risk Assessment, EPA, EPA/630/R-95/002F, April 1998.
55. The Role of Screening-Level Risk Assessments and Refining Contaminants of Concern in Baseline Ecological Risk Assessments, EPA, OSWER Publication 9345.0-14, EPA/540/F-01/014, June 2001.
56. *Ecotox Thresholds*, EPA, OSWER Publication 9345.0-12FSI, EPA/540/F-95/038, January 1996.
57. Issuance of Final Guidance: Ecological Risk Assessment and Risk Management Principles for Superfund Sites, EPA, OSWER Directive 9285.7-28P, October 7, 1999.
58. Guidance for Data Useability in Risk Assessment (Quick Reference Fact Sheet), OSWER 9285.7-05FS, September, 1990.
59. *Guidance for Data Useability in Risk Assessment (Part A)*, EPA, Office of Emergency and Remedial Response, Publication 9285.7-09A, April 1992.
60. Guide for Conducting Treatability Studies Under CERCLA, EPA, EPA/540/R-92/071a, October 1992.
61. *CERCLA Compliance with Other Laws Manual, Two Volumes*, EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9234.1-01 and -02, EPA/540/G-89/009, August 1988.
62. *Guidance on Remedial Actions for Contaminated Ground Water at Superfund Sites*, EPA, Office of Emergency and Remedial Response, (Interim Final), OSWER Directive No. 9283.1-2, EPA/540/G-88/003, December 1988.
63. Considerations in Ground-Water Remediation at Superfund Sites and RCRA Facilities - Update, EPA, OSWER Directive 9283.1-06, May 27, 1992.
64. Methods for Monitoring Pump-and-Treat Performance, EPA, EPA/600/R-94/123, June 1994.
65. Pump-and-Treat Ground-Water Remediation A Guide for Decision Makers and Practitioners, EPA, EPA/625/R-95/005, July 1996.
66. Ground-Water Treatment Technology Resource Guide, EPA, OSWER, EPA-542-B-94/009, September 1994.

67. *Land Use in the CERCLA Remedy Selection Process*, EPA, OSWER Directive No. 9355.7-04, May 25, 1995.
68. *Reuse Assessments: A Tool To Implement The Superfund Land Use Directive*, EPA, OSWER 9355.7-06P, June 4, 2001.
69. *Reuse of CERCLA Landfill and Containment Sites*, EPA, OSWER 9375.3-05P, EPA-540-F-99-015, September 1999.
70. *Reusing Superfund Sites: Commercial Use Where Waste is Left on Site*, EPA, OSWER 9230.0-100, February 2002.
71. *Covers for Uncontrolled Hazardous Waste Sites*, EPA, EPA/540/2-85/002, 1985.
72. *Technical Guidance Document: Final Covers on Hazardous Waste Landfills and Surface Impoundments*, EPA, OSWER, EPA/530-SW-89-047, July 1989.
73. *Engineering Bulletin: Landfill Covers*, EPA, EPA/540/S-93/500, 1993.
74. *Principles for Managing Contaminated Sediment Risks at Hazardous Waste Sites*, EPA OSWER Directive 9285.6-08, February 12, 2002.
75. *Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups*, EPA, OSWER 9355.0-74FS-P, EPA/540-F-00-005, September 29, 2000.
76. *Health and Safety Requirements of Employees Employed in Field Activities*, EPA, Office of Emergency and Remedial Response, EPA Order No. 1440.2, July 12, 1981.
77. *OSHA Regulations in 29 CFR 1910.120*, Federal Register 45654, December 19, 1986.
78. *Standard Operating Safety Guides*, PB92-963414, June 1992.
79. *Community Relations in Superfund: A Handbook*, EPA, Office of Emergency and Remedial Response, OSWER Directive No. 9230.0#3B June 1988; and OSWER Directive No. 9230.0-3C, January 1992.
80. *Superfund Green Remediation Strategy*, EPA, August 2009.
81. *Principles for Greener Cleanups*, EPA, August 2009.